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ECONOMICS, FINANCE AND ACCOUNTING

1

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OMa Ya X TMe2PTY KYMO KYN KMMa g Yf TYR

eMIOYf TPIM UagdYKW

7 -77.

kOd OhKY 8689 TKfM PgYN bgLWTeSTYR SageO Ukh **201797P'ul2P'9s 9uw s 9v Kuund9r39y 2**Tflhqwlilf Krxuqdoz dv hvwdedvkhg e} wkh lyqwhuqdwlrqdoBffrxqwdqf} Uudlqlqj Dhqwuhl/l (zzz/ldwf/dp)/ Ukh mxuqdokdv ehhq sxedvkhg eldqqxdog) vlqfh 31 29 dqg fdq eh dffhvvhg rqdqh dwzzz/hid/dp/

Mz'wx Ov' (78)E

Bup hq Uvkxi kxu}dq (Tf/E/ lq Ffrqrp Ifv- Qurihvvru)

b Ennature v we na Ony UCz

I dvp In Tdkdn}dq

b LM-x3Ews v wL 1x KLP w4's 4

Bql Budnhadq

Ov'MAH's UL 1's Ev D

Mdqd Hulj ru $\}$ dq (Tf/E/ lq Ffrqrp lfv- Qurihvvru- M-x .t.)

N hov Tdkdndq (Qk/E/ dq Qkv/. N dvk/ Tflhqfhv- Qurihvvru- dd - dx .dx)

Ndwldv Qræruq (Qk/E/ la Ffrarp Ifv- F/ Curavra Jaj udp Dkdlu dag

Qurihvvru ri Ffrqrp Ifv- Ehs/ri Ffrqrp Ifv- WdqghuelowVqlyhuvlvy- hfM) [duxkl Tdkdn}dq (Qk/E/ lq Ffrqrp Ifv- Thqlru Mhfwxuhu ri Ffrqrp Ifv-

E hs dumo hawri Ffrarp Ifv- Walashuelow Valyhuvlw - hf M

HqhoLkdfkdwl}dq (Qk/E/ lq Ffrqrp lfv- NCB- BDDB- BxglwTu/ Ndqdj hu-CEP- hf M

L Beludp I E hyl (DGB- Qk/E/Iq Drp p hufh- BvvlvvodqwQurihvvru- I hdg QH dqg Shvhdufk E hs duwp hqwri Drp p hufh Ckdnwdydwdodp p hp ruldo froshij hiru X rp hq- Uwt.)

Nduld Tk = xq (Tf/E/lq Ffrqrp lfv-Qurihvvru-h "t...x)

Olgr Behvdg' h (Qk/E/ $\log F$ frqrp | fv- Qurihvvru- Sx z.t.)

Jox wd Buelgdqh (Qk/E/ lq Ffrqrp lfv- Qurihvvru- Ehdq ri vkh Gdfx ov) ri

Ffrqrp Ifv dqg Ndqdj hp hqw Sh' hnqh Bfdghp $\}$ ri Uhfkqr σ j Ihv- [t .t.)

Bj qlhv' nd Ndrhz vnd (Qk/E/ lq Ffrqrp lfv- Bvvrfldvh Qurihvvru- c t w)

Ma Yf OYfe

Ou nane 'ul		6
Slwd I rykdqqlv}dq	PswlpdoBoorfdwlrqriQhqvlrq Gxqgv/Thqvlwlylw)Bqdd,vhvriwlkh BgnxvwlngTkdushSdwlr	6
Sh'd Cdudwl	Jqvhus uhvlyh Twux fvx udo Nrghodqj Iq Nxqlfls do Qurnh fwr Slvn Ndqdjhphqw	28
Bup hq Uvkxjkxu}dq Hhyruj Zhp hqr†ndq	Jvvxhv ri Dkrrvlqj Dorxg Drpsxvlqj Qodwirupv	43
P'9s 9u's UKuu1d918F	ły	55
Pwdu Behvdg'h Hhyruj Nduwlurv}dq	Jvvxhv ri Twudwhj lf Bffrxqwlqj iru Txvwollqdeoh Ehyhorsphqwri Fqwhusulvhv	55
Ox qh Tdkdn}dq	Jvvxhv ri Drqwurodqj Txvwdlqdeoh Ehyhorsphqwri Cxvlqhvv	68
Hd}dqh Bydddq	GqdqfldoShvrxufhv Bffrxq. vlqj Jvvxhv lq Vqlyhuvlvlhv	75
Hhyruj Nduvlurv}dq	DrqfhswxdoQurednpvriJpsdn. phqwdwlrqTwduwhjlfBffrxqwlqj	87
Кф'Թ		97
H}xoor Bude}dq	Drqvhs wxdoJvvx hv ri JqvhuqdoBxglw	97
Oxqh Tdkdn}dq	Cdvlf Jvvxhv ri Ndqdj hudloBxglwlq Cxvlqhvv	::
MdwBygdd dq	BfwkduldoQurilwlq wkh Drqwh{w ri Ffr.Bxglwlqj	21 9

P' 9s 9uw		231
Udvx oN dqdvhu} dq	Fqvxulqj GlqdqfldoThfxulv) lq vkh Gdfh ri DrpshvWrq Chvzhhq OdWrqdodqg Fdnfvurqlf Dxuuhqflhv	231
Hd}dqh Bydddq	Ukh Jvvxhv ri GlqdqfldoShvrxuvhv Vvlqj Bvvhvp hqwlq Vqlyhuvlvhv	249
N dudwN dqxfkdu}dq	Ukh GlvfdoQrdvf}rivkh Shsxedvfri Buphqld dv d Urroiru Ndfurhvfr. qrplf Shjxodvkrqrivkh Ffrqrp}	25:



Pb UF' F55w .4. z5764AEA6958EA9D66E38689474734

d'6 S 1/2 s 99'02 9

 $Qk/E/vw.ghqwdwZTV\\ BSNCVTJOFTTCBOL DKTD-I hdg ri DUQS glylvlrq\\ ulwdkrykdqqlv\}dqj Ajp dloffrp$

a bf TX KWKWWa MKf Ta Y a P b OYe Ta Y Pg Y Ne4e OYe TF Th TF k KYKWkeOe a Pf S O KNUg ef ON e S Kd b O d Kf Ta

Kt Dbs urb Jq rughu wr rswlp dod p dqdj h shqvlrq ixqgv-dq rswlp do sruwirdr lv frqvwuxfwlng xqghu ydulrxv frqvwudlqw/ Ukh Tkdush dqg dgnavwlng Tkdush udwlrv duh fdofxodwlng/ Bq dvvhvvp hqw ri wkh v}pp hwu} dqg vsuhdg frhiilflhqwr ri wkh rswlp do sruwirdr }lhog lv p dgh/ B vhqvlwlylw) dqdd vlv ri wkh rswlp do sruwirdr lv shuirup hg dqg irxqghg wkdwzkhq xvlqj wkh Tkdush udwlr dv d ghflvlrq fulwhulrq- wkh rswlp do dp lwiru wkh frxqwu} dqg dvvhw lv 46%-zkloh xqghu SB odz lwlv 26%-dqg wkh rewdlqhg uhvxowlv vwdeon zlwk uhvshfwwr v}pp hwu} dqg vsuhdg/

V wal. Nev ODs hqvlrq ixqgv-rs vlp dos ruvirdr- ulvn- Tkdus h udvlrdgnavvlng Tkdus h udvlr

LOWu?v wDH39

d w D vs Luz s' P D Ukh dlp ri vkh uhvhdufk lv vr dfklhyh p d{lp x p hiilflhqf} ri vkh shqvlrq ixqg lqyhvvp hqwre} xvlqj vkh Tkdush udwrdv d fulwhulrq-dqg vkrz vkdwvkh uhvxowlv vwdeon z lvk uhvshfwvrv}p p hwu} dqg vsuhdg/

d w Luz z To Rew L D J w lv vxssrvhg vk dwrs w p dodoorfdwrq rishqvlrq ixqgv dqg vhqvlwlylw dqdd vhv lv ylwdo iru dfklhylqj pd{lpxp hiilflhqf} ri vkh shqvlrq ixqg/

79024 AUGH

Ukhuh duh ydulrxv dssurdfkhv e} z klfk da layhvwru fda hydoxdwh vkh shuirup dafh ri d sruwirdr/ Ukh p dla remhfwyh ri shavlra ixag p dadi huv lv wr p dadi h wkh rswlp dosruwirdr xaghu ydulrxv dvvhw lgyhvyp hgwfrgvuudlgw- vkh dvvhwdoorfdwlrg vwudwhij}-zkhvkhu vkh z hlj kw duh rswlp dog doorfdwhg-z kdwdp rxgwri ulvn frp hv iurp vkrvh dvvhwj urxsv-dag z khvkhu vkhuh duh dvvhw vkdwglyhuvli} vkh ulvn ri vkh sruwirdr/ la rughu wr hydoxdwn vkh shuirup dafh ri vkh sruwirdr- vkh Tkdush dag dgnavvng Tkdush udvlr duh fdofxodvng la vkh z run/ Jayhvvp haw dovr uht x luh fravlghulaj vkh v}p p hwu} dag vsuhdg ri vkh sruwirdr glvwulexvlrq-iru z klfk vkh dgnavvlng Tkdush udwir ly fdofx odwng/Thhp d Tkdup d lq Tkdush udwir dag lairup dwlra udvlr; gr vkh} uhdod khos lqyhvvo hqwghflvlrqv@uhvhdufk]2avkrxj kw vkdwvlpsdiflyr ri udwlr dodgv vr lwr i uhdwlovwz hdoghvv/ Ukh udwlr lv xvhixoiru hydoxdwlgi vkh sruwirdr exwrgd lg dip lvhg vlwxdwlrg/ Jwlv qrw dssdfdedn lq dv}p p hwulf vlwxdWrqv/ N/ Whqxirsdo dqg T/ Trskld frafoxghg]3a vkdw dgnavvng Tkdush udvlr lv vkh ehvw shuirup dqfh phdvxuh vkdwfdq eh xvhg lq vkh yrodvloh pdunhw/

Tkdush udwir kdv ehfrph sduwri wkh fdqrq ri prghuq ilqdqfldo dqddylvv- wkh uhvxow ri Gudqflvfr Cduloodv- Sd}prqg Ldq- Dhvduh Srerwirdqg Kd} Tkdqnhq vwxg}]4asuhvhqving lq duwlfon vxjj hvwwkdw dpruh vrsklvwlfdwing dssurdfk wr lqvinus uhvlqj Tkdush udwir lv fdoong iru-rqh vkdwlqfrusrudwinv lqirup dwirq derxwwkh lqyhvvp hqwvwyon vkdwj hqhudwing vkh uhwxuqv dqg vkh pdunhwhqylurqp hqwlq zklfk vkrvh uhwxuqv zhuh j hqhudwing/

Ukh prvwfrpprq dqg fodvvlfprgho Ndunrzlwi]5aprgho lvxvhg iru rswlpdo dvvhw pdqdjhphqwi Bffruglqj wr Ndunrzlwiki dssurdfk-lqfkrrvlqj wkhrswlpdosruwirdr-wkhuhwkuqdqgyrodwldwi ri wkh sruwirdr duh lpsruwdqw zkhuh wkh dprxqwri ulvn lv wkh vwdqgdugghyldwlrqri wkh h{shfwlnguhwkuq/

Ukh ehorz lv suhvhqvhg vkh h{shfvhg uhvxuq dqg vvolqgdug ghyldvlrq ri vkh sruviroir;

$$\mu_{p}(w) = w^{T} * \mu, \quad \sigma_{p}(w) = (w^{T} * \Sigma * w)^{0.5}$$

zkhuh

 μ . O{2 yhfwru- i.vk hohp hqw lv vkh h{shfvhg udvh ri uhwxuq rq vkh uhohydqwdvvhw

w . Nx1 yhfwru- i.wk dnp hqw lv vkh z hlj kw ri vkh fruuhvsrqglqj dvvhwlq vkh sruwirdr dqg $\sum w=1$, μ_p dqg σ_p . sruwirdr uhwxuq dqg vwdqgdug ghyldwlrq-

 Σ . O{O fryduldgfh p dwll{ ri dvvhwuhwkuqv/

Ukh Ndunrylw prgho lv frqvlghuhg dv vkh edvlv iru vkh hydoxdwlrq ri vkh rsvlpdosruvirdr/ Jq vklv vvxg}- vkh iroorzlqj lqvhusuhvodvlrq ri vkh Ndunrylw prghovl surednp vroxvlrq zlvk vhyhudodplvodvlrqv duh frqvlghuhg.

$$\Pi(w) = w^T * \mu - \lambda * w^T * \Sigma * w -$$

$$A * w = b -$$

$$C * w \le d -$$

z khuh λ lv wkh ulvn wrohudgfh frhiilflhqw/

Ukh sruwirdir fruuhvsrqglqj wr wkh pd{lpxp Tkdush udwlr lv frqvlghuhg dv wkh rswlpdosruwirdir]6a/U}slfdog- wkh Tkdush udwlr lv xvhg wr phdvxuh d sruwirdirkl shuirupdqfh- dqg wkh kljkhu wkh udwlr- wkh kljkhu wkh sruwirdirkl uhwxuq shu xqlwri ulvn- zkhuh ulvn lv phdvxuhg e} wkh sruwirdirkl vwdqgdug ghyldwlrq/

Ukh Tkdush udwlr Iv;

$$SR = (\mu_n - r)/\sigma_{n}$$

zkhuh rlv wkh ulvn.iuhh udwh ri uhwxuq/

Jqyhvwruv/Uılvn suhihuhqfh fdq eh ghvfulehg lq whup v ri h{shfwhg uhwxuq dqg vwdqgdug ghyldwlrq/ Gru dq} dnyhori ulvn- vkh sruwirdr z lwk wkh klj khvwh{shfwhg uhwxuq lv suhihuuhg- ru- ht xlyddhqwð}- iru dq} dnyhori h{shfwhg uhwxuq- vkh sruwirdr z lwk wkh dndvwulvn lv suhihuuhg/ Ukh klj khu wkh TS udwlr- vkh klj khu wkh h{shfwhg dgglwlrqdouhwxuq ($\mu_p-r)$ iru wkh xqlwulvn (σ_p) ri wkh sruwirdr/ Ukh Tkdush Sdwlr whoov dq lqyhvwru z kdw sruwlrq ri sruwirdr v shuirup dqfh lv dvvrfldwhg z lwk ulvn.wdnlqj / Jwp hdvxuhv d sruwirdr v dgghg ydxh uhodwlyh wr lw wrwdoulvn]7a/

Ukh Tkdush udwir grhv qrwwdnh lqwr dffrxqwwkh v}pphwu} dqg vsuhdg ri wkh glvwulexwirq ri wkh uhwxuqv ri wkh sruwirdir-vr lq rughu wr hydoxdwin wkh vwdeldw) ri wkh rewdlqhg uhvxow-wkh dgnavwing Tkdush udwir lv fdofxodwing lq wkh vwxg}/ Guvw wkh glvwulexwirq prphqwr ri wkh 4ug dqg 5wk rughu duh fdofxodwing-dqg wkhq wkh dgnavwing Tkdush udwir. BTS]6a/

$$ASR = SR \left[1 + \frac{\mu_3}{6} * SR - \frac{\mu_4 - 3}{24} * SR^2 \right],$$

 $z\,khuh~\mu_3\,,\mu_4~$ duh vkh vwdqgdugl'hg fhqwudo prphqw ri vkh fruuhvsrqglqj uhwxuq glvwulexvlrq@

Ukh wklug.rughu p rp hqwru vp p hwu1 idfwru lv d p hdvxuh ri wkh glvwulexwlrq W1 vp p hwu1/ B glvwulexwlrq lv vp p hwulf z khq wkh ulj kw dqg dniwvlghv duh ht xdo wkdwlv- wkh wklug.rughu fhqwudop rp hqwlv

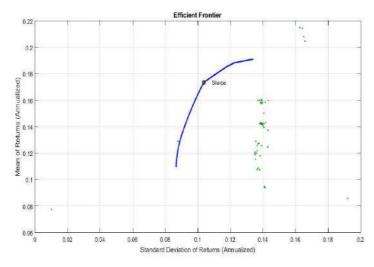
'hur/ Ukhirxuwk.rughu prphqwru frhiilflhqwri vsuhdg-vkrz v vkh frqfhqwudwlrq ri vkh glvwulexwlrq durxqg vkh phdq/ Ji vkh odwhu lv vpdodhu vkdq 4-zh kdyh d glvwulexwlrq fhqwhuhg durxqg vkh phdqdqg vkh rssrvlwh lv d phdq rijuhdwhu vsuhdg/

Ukh vroxvlrq ri vkh surednp lv suhvhqvlng qrwdqdd vlfdod - exw qxp hulfdod - xvlqj vkh Ndwode surjudp / Vqghu ydulrxv frqvwudlqwrswlp dosruwirdry duh fraywux fwhg dag e} dssallaj wkh Tkdush udwlrvkh ulvnOuhwkuq ehkdylru ri vkhvh sruwirdry duh dqdd'hg dffruglqi wr vkh vshflilhg fulvhulrg/ Gru vkh frgvwxfwlrg ri vkh sruwirdrxakhgi hg uhwxuqv duh iluvwfdofxodvhg- edvhg ra vkh uhwxuqv ra dvvhw lq gudp ydoxh/ Ukh rsvlip do sruvirdrv duh frqvvuxfvlig e} dssqlqj uhvwulfvlrqv e} vkh fxuuhqf} ri vkh dvvhw wudghg dqg uhvwulfwrqve} frxqwu}/ Drqvlghulqi wkdwwkhuh duh p lvvlqi gdwd lq vkh dvvhw sulfh vhulhv- vkh h{shfvhg uhvxuq dqg vkh fryduldqfh p dwal{ duh hvvlip dvlng xvlqj vkh p lvvlqj gdval p hvkrg- dqg vkhq vkh fryduldafh p dwul{ lv ilowhung edvng ra vkh udagrp p dwul{ vkhru}/ Oh{w wkh rswlp dosruwirdr lv hydoxdwng edvhg rg wkh Tkdush udwlr/ Gru vkh rsvlip dosruvirdr- dq dvvhvvp hqwri ulvn vvalvlvvlfv lv fduulhg rxwe} fxuuhqf}-e} frxqwu} dqg e} vhfwru-dv z hoodv lq vkh fdvh ri ydulrxv uhvvulfvlrqv-e} fdofxodvlqj vkh Tkdush dqg dgnavvlng Tkdush udwrv- d frp sdudwlyh dqdd vlv ri wkh sruwirdrv dqg wkh vwdeldw) ri wkh rewdlahg uhvxowlv shuirup hg/

Jq rughu wr hydoxdwh wkh rswlp dosruwirdr- lqyhvvp hqw lq FUGv]8a OFUG (F{fkdqj h wudghg ixqg) . dj urxs ri erqgv- vhfxulwhv dqg rwkhu wyshv ri vhfxulwhv Odqg SBj ryhuqp hqwerqg lqglfhv OFUG dqg lqglfhv . khqfhiruwk dfwyh O duh frqvlghuhg/ Ukh gdwd duh revhuyhg prqwkd iurp 1 2/1 2/31 25 wr 1 3/39/31 33/ iru wkh shulrg dqg duh grz qordghg iurp Corrp ehuj]9a/ FUGv duh vhohfwhg edvhg rq wkh iroorz lqj fulwhuld; prqwkd sulfh dydlodeldwy- Nruqlqj vwdu

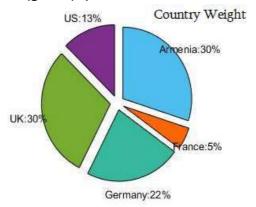
Qhuirup dqfh SdWqj 5 dqg 6 vwduv- uhj lrq; VTB- VL- Gudqfh- Hhup dq}- fdsIwdo p dunhw ydoxh j uhdwhu vkdq 211-111- 4.p rqwk dyhudj h yroxp h j uhdwhu vkdq 21-111- wxuqryhu vkh frhiilfIhqwIv j uhdwhu vkdq 2/ Bv d uhvxow 59 FUGv duh rewallqhg z lwk vkh deryh s dudp hwhuv- dqg UCJ glvfrxqwerqgv z lwk d p dwxulwy ri 2 z hhn dqg p ruh dqg H6J frxsrq erqgv z lwk d p dwxulwy ri 6 }hduv dqg p ruh duh frqvlghuhg dv vkh lqgh{ ri SB j ryhuqp hqwerqgv]: a/ Jq vkh fdvh ri vkh edvh vfhqdulr- uhvwulfwlrqv e} frxqvu} dqg fxuuhqf} duh ghilqhg dv irogrz v; dv orz hu op lwp lqlp xp 6% s hu frxqvu} dqg 21 % s hu fxuuhqf} dv xsshu dp lw41 % s hu frxqvu} dqg 51 % s hu fxuuhqf} p d{lp xp lqyhvvp hqwlq hdfk dvvhw31 % dqg p lqlp xp 1 %/ Ukh uhwxuq rq vkh ulvn.iuhh dvvhwlv hvwlp dwng dw9% dwz run/

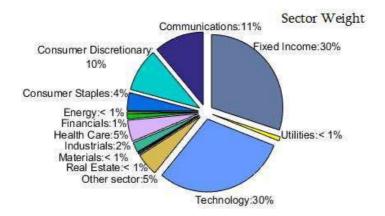
Bv d uhvxowri rswlp l'dwlrq-edvhg rq vkh h{shfvhg uhvxuq dqg ulvn hvvlp dvhv iru vkh deryh p hqwlrqhg dvvhw- vkh hiihfvlyh dp lwri vkh sruwirdrv lv fddfxodvhg; Gjxuh 2/ Ukh slfvxuh dovr vkrzv vkh rswlpxp Tkdush sruwirdr;



VB лзу ;. UzzBNBy Рк zзаРиВуз5g Бизву зинВп : .AE

Chorz vkrzv vkh glvvulexvlrq ri rsvlp do Tkduslh sruvirdr z hlj kw e} vhfvru dqg frxqvu}/

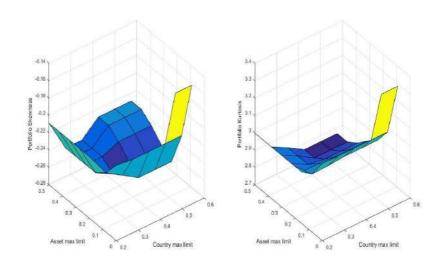




VB лзу А. Т Выв В л н В Р а z g Бизв у в азка л В о у В Бни v я мал Р ю я и Рх и у м н а з

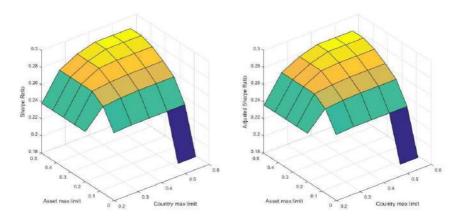
Jq rughu wr hydoxdwh wkh vhqvlwlylw) ri wkh rewallqhg uhvxow wr wkh fkdqj h ri uhvwulfwlrqv- dv d edvh rswlrq- wkh uhvwulfwlrqv rq wkh lqyhvwp hqw ri dvvhwr ri wkh ixqgv ghilqhg lq wkh SB Mdz rq Bffxpxodwhg Qhqvlrqv]21 a duh frqvlghuhg- dqg xqghu wkhvh

uhvwulfvlrqv- vkh 4ug dag 5vk rughu prphaw duh iluvwfdofxodvlng 0Gjxuh 40 Tkdush dag dgnavvlng Tkdush udvlrv 0Gjxuh 50 Ukhq vkh ghyldvlrqv iurp vkhvh uhvvulfvlrqv dag vkh vhqvlvlylvly ri vkh frhiilflhavvr vkhp duh frqvlghuhg/



VB лзу В. d азкzа Мани Иуо Руши и Рх Илзка иВи

Jq Gj xuh 4 zh uhfhlyhg lqirup dwrq derxwwkh v}p p hwu} dqg glvwulexwrq ri vkh sruwirdr<wkh fhqwudop rp hqwri vkh vklug rughu lv qhj dwlyh- exw wdnlqj lqwr dffrxqw lwr p dj qlwxgh- lw fdq eh frqfaghg wkdwwkh glvwulexwrq ri rswlp dosruwirdrv lv v}p p hwulf derxwwkh p hdq xqghu wkh ydulrxv frqvwudlqw/ Tlp ladua}- wkh sarw vkrz v vkdwwkh irxuwk.rughu fhqwudop rp hqwri vkh rswlp dosruwirdr lv yhu} farvh wr vkuhh- iurp z klfk zh fdq frqfagh vkdw vkh glvwulexwlrq ri uhwxuqv ri vkh rswlp dosruwirdr kdv dap rvw' hur h{fhvv (uhadwlyh wr vkh qrup doglvwulexwlrq) vsuhdg/ Ukhuhiruh- lwfdq eh frqfaghg vkdwwkh glvwulexwlrq ri uhwxuqv ri vkh rswlp dosruwirdr grhv qrwkdyh vlj qlilfdqwdv}p p hwu} dqg h{wud vsuhdg/



VB лзу C, gБизву uPx их Эгинух gБизву зинВли л Рхуз wa РинзиВРниЗ иу РиВВВня

Bv d uhvx ow z h fdq vhh iurp Gj x uh 5 vkdwwkh revallqhg rs vlp do uhvx owkdv qr ghyldvlrqv- lwlv vvaledn z lvk uhvs hfwvr v}pp hvul dqg vs uhdg/Ehs hqglqj rq vkh dp lvalvlrqv- vkh ydox hv ri vkh Tkdus h udvlr duh gliihuhqv/B glyhuvlilhg s ruvirdr fdq eh fkrvhq x qghu gliihuhqw frqvvudlqw- dqg vkh p ruh vkh frqvvudlqw duh uhod{hg- vkh oduj hu vkh Tkdus h udvlr ehfrp hv/

Ukh vhqvlvlylv) dqdd vlv ri vkh Tkdush udvir ri vkh rsvlp do sruvirdr lv fduulhg rxwghshqglqj rq vkh pd{lpxp shuplvvledn zhljkwri vkh dvvhwdqg vkh frxqvu}/ Ukh udqjh ri vkh pd{lpxp zhljkwri vkh dvvhwlv 6///61%-dqg vkh udqjh ri vkh pd{lpxp zhljkwri vkh frxqvu} lv 6///61%-dqg vkh udqjh ri vkh pd{lpxp zhljkwri vkh frxqvu} lv 6///71%/ Bv fdq eh vhhqiurp Gljxuh 4-vkh Tkdush udvir ri vkh rsvlp dosruvirdr uhdfkhv lw vvdedn dnyhodwd pd{lpxp dplwri 46% ri vkh dvvhwdqg frxqvu}-dqg vkh fkdqjh ri vkh Tkdush udvir lv dqprvw' hur dw odujhu pd{lpxp doorz dedn zhljkw/ Ji vkh Tkdush udvir lv 1/34 lq vkh fdvh ri uhvvulfvirqv doorz hg e} odz-lwfdq uhdfk 1/39 li vkh uhvvulfvirqv duh uhod{hg-zkhuh vkh rsvlp do uhvvulfvirq lv 46% iru ervk vkh frxqvu} dqg vkh dvvhv/v Bv d uhvxovri

which vhavivily dada vivini which depressing Theorem Lawrence which when vivinity and vivinity a

WUDUITHUUD

Vqghu wkh frqvvudlqw-dq rswlp dosruwirdr lv frqvvuxfwlng dqg wkh Tkdush udwlr lv hvwlp dwlng iru wkh rswlp dosruwirdr/ Ukhq-vhqvlwlylw) dqddyvlv ri Tkdush dqg dgnavwlng Tkdush udwlr wr gliihuhqw frp elqdwlrqv ri uhvvulfwlrqv e} frxqwu} dqg e} dvvhwlv fduulhg rxw/ Bv d uhvxowri wkh dqddyvlv- lwlv irxqg wkdwz khq xvlqj wkh Tkdush udwlr dv d ghflvlrq fulwhulrq- wkh rswlp dodp lwiru wkh frxqwu} dqg dvvhwlv 46%- z klon xqghu SB odz lwlv 26%- dqg wkh rewollqhg uhvxow lv vwoleon z lwk uhvshfw wr v}p p hwu} dqg vsuhdg- ehfdxvh wkh ghyldwlrqv ri wkh ydoxhv duh lqvlj qlilfdqw/

d wxwEwAuwDD

- 2/ **gyyHu3g55** Tkdush udwlr dqg lqirup dwlrq udwlr; gr vkh} uhdab} khas lqyhvvp hqwghflvlrqv@JSKNTI Wro: Jvvxh 8-3129-:2:8
- 3/ **а иМиБя ј уРл' авиМ**t w **gБизаР давБВ**i- F{dp | qlqj Tkdush SdWr-BTS-TruMqr-Uuh}qru dqg Jqir SdWr |q Jqg|dq FtxlW) Nxwxdo Gxqgv gxulqj vkh Qdqghp |f- JqvhuqdWrqdo Krxuqdo ri Ndqdj hp hqw 22(22)-31 31 ss/2378.238:

- 4/ VsuPvBva RusBMu3f usHaPx [uP3Syuusy favandBuPx Zusg BuPVyP2NrghoDrpsdulvrqzlvk Tkdush Sdvlrv-krxuqdori Gqdqfldodqg Rxdqvlvdvlyh Bqdg vlv Vvraph 66 Jvvxh 7 Thsvhpehu 31 31 ss/2951 . 2985
- 5/ **[uuBBP' uH3Tf 5f 5**2 Jayhvvp hawdag Qruwirdr p dqdj hp haw 31 25-Qds hu Drgh; N CGN 51 1 2-298.31 5.
- 6/ **PMyuPxy33 S5B uPx g5yyx93 U**4 Ukh Qurihvvlrqdo Slvn Ndqdj huv I dqgerrn- d frp suhkhqvlyh j xlgh wr fxuuhqw wkhru} dqg ehvw sudfwlfh- QSNJB ulvn p dqdj hp hqwwhulhv- 31 26- 76.77-222.246-81: . 823/
- 7/ [Bx3T52] Jayhvvp hawshuirup dafh p havxuhp haw vkh Tkalush Sawr dag vkh Jairup dwra Sawr-DGB-3122
- 8/ kwsv;00lqdqfh/}dkrr/frp0hwiv
- 9/ kwsv;00zzz/eorrpehuj/frp0
- :/ kwwsv;00zzz/fed/dp 0dp 0TlvhQdj hv0lp rilqdqfldqo dunhwv/dvs{
- $21 / kwsv; 00zzz/dudv/dp 0ErfxphqwWhz/dvs{@grflg>234458}$

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> f u- ...xwF7A46: 48689 Mvx xwy u".vt ... F9646: 48689

dws Lsts &

Qk.E. vwk.ghqw FVB uh'dedudwl: 2A j.p.dlø/frp

TYf Od bd Of Th O ef d g Mf g d KWX a N OWWTYR TY X g Y TMTb KW bd a UOMf e d TeV X KY KROX OYf

Kt Das unabukhuh Iv ulvn Iq doos urnhfw-d fruuhfwxqghuvwdqglqj ris urnhfwulvn fdq khos surnhfwp dqdj huv wr frpsohwh lw/ Ukhuhiruhwkh sxusrvh ri wklv vwxg} lv wr lghqwli} dqg udqn wkh ulvn frpsrqhqw ri pxqlflsdo lqiudvwuxfwxuh surnhfwr edvhg rq wkh Twuxfvxudo Jqwhusuhwlyh Bssurdfk (JTN)/

Glqdag)- wkhuh z huh 52 lqglfdwruv lq wkh vxevhwri 9 glp hqvlrqvz klfk lqfaxghg (Puj dql'dwlrqdo ulvn- Jqglylgxdo ulvn- dqg Fqylurqp hqwdo ulvn- Gdp lddulw) ri hp sar}hhv z lwk surnhfwfrqwuro Glqdqfldo exughq lp srvhg- Jqlwldo p lvfdafxadwlrq dqg lqfrp sahwh ghilqlwlrq ri vwdnhkraghu qhhgv- Jqwhushuvrqdo ulvn- Jqwhuqdo surfhvvhv ri ruj dql'dwlrqdo fxaxuh)/ Drp srqhqw (Puj dql'dwlrqdo ulvn- Jqglylgxdo ulvn- dqg Fqylurqp hqwdo ulvn) lv lq wkh iluvwohyho frp srqhqw (Gdp lddulw) ri hp sar}hhv z lwk surnhfwfrqwura) lv lq wkh vhfrqg dnyho frp srqhqw (Glqdqfldo exughq lp srvhg- Jqlwldo p lvfdafxadwlrq dqg lqfrp sanwh ghilqlwlrq ri vwdnhkraghu qhhgv- Jqwhushuvrqdo ulvn) lv lq wkh vklug dnyho dqg frp srqhqw (Jqwhuqdo surfhvvhv ri ruj dql'dwlrqdofxaxuh) lv lq wkh irxuwk dnyho

Vwal. Nev ODTwuxfvx udo Jqvhrus uhvlyh Bssurdfk (JTN)- ulvn vdnlqj - NJDN BD dqdg vlv p hvkrg- p xqlflsdosurnhfvv UDWuls Ozi vs 1879: H42

THAPHY AHAPPT

Shvhdufkhuv kdyh flwng vrph ri wkh uhdvrqv iru wkh pdq} idloxuhv lq vhuylfh ruj dql' dwlrqv/surthfw dv vkh lqdght xdf} ri ulvn p dqdj hp hqwp hfkdqlvp v dqg surfhvvhv- dv z hoodv vkh qhj dj hqfh ri surthfwp dqdj huv lq lp sdnp hqwlqj vkhp / Qurthfw z krvh ulvnv duh qrwhiihfwlyhd p dqdj hg z looidfh j uhdwnu ulvnv]2a/ I rz hyhu- dv vkh surthfw ri vhuylfh ruj dql' dwlrqv ehfrph pruh frp sdn{ dqg lp sruwdqw vkhuh lv d qhhg wr lp sdnp hqwd v}vvhp dwlf dssurdfk wr ghdoz lwk surthfwlvvxhv dqg ulvnv wr hqvxuh j uhdwnu surthfwvxffhvv]3a/ Jq vkh errn (Nhdvxuhv- Lh} Qhuirup dqfh Jqglfdwruv- dqg Qurthfw Ndqdj hp hqw Jqglfdwruv)- I durog Lu' qhu- d dhdglqj surihvvru ri surthfwp dqdj hp hqw vwdwnv vkdwderxw81 % ri surthfwr lq vkh z ruog duh ghod}hg]4a/ Jwlv revhuyhg vkdwghod}v lq z ruog surthfwr duh d qdwxudo vklqj vkdwlqglfdwnv srru shuirup dqfh lq ydulrxv duhdv ri surthfw/ Jq Judq- z klfk lv dqrvkhu ghyhorslqj frxqwa}-ghod}v lq lp sonp hqwdwlrq surthfwr duh hqrup rxv/

Jq 2: 96- wkh Dhqwhu iru Shvhdufk dqg Ehyhorsp hqwri Qurmhfw Ndqdj hp hqwfrqgxfwng d vwxg} dqg sxedvkhg d uhsruwrq wkh uhdvrqv iru vkh ghod}v lq vkh frxqwu}kl surnhfw/ Ukh uhsruwvwdwhv vkdwwkh dyhudj h surnhfwwlp h lq vkh vhfrqg ghyhorsp hqwsodq z dv 709 }hduv- lq vkh vklug ghyhorsp hqwsodq z dv 60 }hduv- dqg lq vkh iluvw}hdu ri vkh irxuwk ghyhorsp hqwsodq z dv 22 }hduv- dqg vkh gxudwlrq ri Judqkl qdwlrqdo surnhfw z dv 603 }hduv (ht xdo wr vkh j oredo gxudwlrq)/ Jq lw uhsruw vkh Ehyhorsp hqwdqg Shqrydwlrq Puj dql' dwlrq ri Judq dovr p hqwlrqhg vkdwwkh gxudwlrq ri oduj h.vfdoh surnhfw dwwkh lqwhuqdwlrqdodnyholv 4 }hduv- z klfk lv derxw: wr 22 }hduv lq Judq/ Slvn lghqwlilfdwlrq lqyroyhv vkh surfhvv ri ghwhup lqlqj vkh ulvnv diihfwlqj vkh surnhfw dqg grfxp hqwlqj vkhlu fkdudfwhulvwlfv/

Slvn dvvhvvp hqw h{dp lqhv surnhfw ulvnv dffruglqj wr vkhlu fkdudfvhulvwlfv vxfk dv suredeldw)- vhyhulw) dqg ulvn uhvsrqvh wr surj uhvv/ Jq dgglwlrq- vwudwhj lhv duh vhohfvhg dqg lp sohp hqwhg z lwk wkh dlp ri uhgxflqj ulvn h{srvxuh/ Slvn uhvsrqvh sod} v dq lp sruwdqw uroh lq uhgxflqj wkh qhj dwlyh vhyhulw) ri surnhfwulvnv]2a/ Jq wklv uhvhdufk- dq dwhp sw kdv ehhq p dgh wr surylgh d prgho e} lqvhus uhvlyh vwuxfwx udoht x dwlrqv vkdwfdq vkrz wkh ulvn frp srqhqw ri p xqlfls dolqiudvwuxfwx uh surnhfw/

X was Λ Λ Λ

Ukh suhvhqwuhvhdufk lv dssolhg lq vhup v ri qdvx uh dqg sxusrvhtxddvvdvlyh lq vhup v ri gdvd vhdufk lq vhup v ri uhvhdufk dqg ghvfulsvlyh.dqdd vlfdo lq vhup v ri gdvd dqdd vlv/ Ukh lqvhusuhvlyh vwuxfvxudop hvkrg lv dq hiihfvlyh dqg hiilflhqwp hvkrg iru vrslfv lq z klfk Rxddvvdvlyh yduldednv lqvhudfwzlvk hdfk rvkhu dwgliihuhqw dnyhov ri lp sruvdqfh/ Vvlqj vklv vhfkqltxh- vkh uhodvlrqvklsv dqg ghshqghqflhv ehvx hhq vkh txddvvdvlyh yduldednv ri vkh surednp fdq eh glvfryhuhg/ Uklv p hvkrgrorj} h{dp lqhv vkh rughu dqg gluhfvlrq

ri wkh frp soh{ uhoodwlrqvklsv ehwz hhq wkh hohp hqw ri d v}vwhp - e} $z klfk wkh frp soh{lw} ehwz hhq wkh hohp hqw fdq eh ryhufrp h]5a/$

Edwal frashfyling virrov lq yklv vyxg} z huh deudu} vyxglhv-lqyhuylhz v dqg lqyhus uhylyh vywxfyx udot x hvylingqdluhv/ Ukh vyxdylyylfdo srsxadyling ri ykh vyxg} lqfaxghv daos urihvvruv dqg s urihfyhl{s huw-p dqdj huv ri Uhkudq Nxqlflsddyl/ Jq ykh iluvw vyhs-e} vyxg}lqj ykhrulhv-prghay-dss urdfkhv dqg xvlqj deudu} uhvrxufhv-vhdufklqj ykh Jqyhuqhwdqg gdwaledyhv ri yddig grp hvylif dqg iruhlj q hdnfwurqlf sxedifdylrqv-ykh ulvn.yalnlqj frpsrqhqwr ri Uhkudq Nxqlflsddyly z huh lghqylilhg/ Jq ykh frqylqxdylrq ri yklv yhfylrqxvlqj lq.ghsyk dqg yhpl.vywxfyxuhg lqyhuylhz v-ykh vyalylyylydo ydpsdn z dv dvnhg yr dqvz hu ykh lqyhuylhz txhvylirqv edvhg rq ykh glp hqylrqv ri ulvn.yalnlqj /

Nxqlflsddwlhv uhvsrqg/Jwwkrxog eh qrwlng wkdwwdpsdqj lq wklv sduwri wkh vwxg} z dv sxusrvhixoxqwlo26 shrson z huh lqwhuylhz hg wr dfklhyh wkhruhwlfdovdwxudwlrq/Jq wklv sduw sduwlflsdwlrq lq wklv uhvhdufk z dv frpsdhwlog iuhh e} lqglylgxdov dqg wkh} z huh dvvxuhg wkdwwkhlu dqvz huv z rxog uhp dlq frqilghqwldof Thp I.vwuxfwxuhg dqg lqwhudfwlyh.sduwlflsdwru} p hwkrg z dv xvhg wr frqgxfw lqwhuylhz v dqg frodhfw gdwl/Ukh qxpehu ri lqwhuylhz v frqwlqxhg xqwlo wkh wkhruhwlfdovdwxudwlrq z dv uhdfkhg/Bovr-lqwhuylhz v z huh frqgxfwlng lq shuvrq-p hhwlqj v z huh khog dqg rqdqh wkurxj k yluwxdoqhwz runv/Ukh lqwhuylhz wlp h ydulhg iurp 36 wr 56 p lqxwlnv/

Bivhu frochfoldj vlkh gdwd- vlkh iluvw vwdjh ri Ehoski vhpl. vwuxfoxuhg txhvvlrqqdluhv zhuh ghvljqhg edvhg rq lw dqg vlkh sduwlflsdqw lq vlkh uhvhdufk zhuh dvnhg wr lghqvli} vlkh lpsruwdqw glphqvlrqv dqg ulvn frpsrqhqw ri lqiudvvuxfoxuh surnhfow- dv zhoo dv vlkh glphqvlrqv dqg lqglfdwruv/ Bgg rvlkhu srvvledn lvlnpv vr vlkh dvv/ Ukhq-dffruglqj vr vlkh uhvxow ri vlkh suholplqdu} txhvvlrqqdluh-

wkh vhfrqg vwdj h txhvwlrqqdluh (Ehoskl) z dv ghvlj qhg wr dfklhyh frqvhqvxv rq hiihfwlyh lqglfdwruv edvhg rq wkh Mnhuw vfddn/Rxhvwlrqqdluh rswlrqv lqfoxglqj; yhu} klj k (6 srlqw)- klj k (5 srlqw)- p hglxp (4 srlqw)- orz (3 srlqw)- yhu} orz (2 srlqw) z huh frqvlghuhg dqg wkh uhvhdufk sduwlflsdqw z huh dvnhg wr udwh hdfk ri wkh frpsrqhqw/Hlyh/

Jq vklv vvxg}- vkh yddglv) ri vkh JTN txhvvlrqqdluh kdv ehhq revdlqhg vkurxj k frqvhqv/ Ur ghvhup lqh vkh frqvhqwyddglv) ri vkh txhvvlrqqdluh z dv xvhg e} h{shuw- dgp lqlvvudvruv dqg xqlyhuvlv) surihvvruv dqg vkh yddglv) ri vkh txhvvlrqqdluh z dv frqilup hg/Bovr- vr hqvxuh vkh uhddeldv) ri vkh uhvhdufk- ghvdldng dqg dffxudvh qrvh.vdnlqj dqg dqrq}prxv frglqj z huh xvhg z lvk vkh khos ri frglqj z kr z huh qrvsduvri vkh uhvhdufk vhdp/

የ ዓv 'ዓy ር

e Met 7DTv w410x0 4y Merw L'CO u112 t114w4102 1x 14xts 110xdu104tw tt.

Jq vklv vvxg}-lq rughu wr lghqwli} wkh ulvn.wdnlqj frpsrqhqw ri pxqlflsdo lqiudvvuxfwxuh surmhfw-lwzdv edvhg rq wkh dydlodedn dwhudwxuh dqg vkh edfnj urxqg ri uhvhdufk rq wkh glp hqvlrqv dqg frpsrqhqw ri ulvn.wdnlqj lq hdfk glp hqvlrq-zklfk zhuh pruh frpsuhkhqvlyh dqg jhqhudo zhuh lghqwlilhg/ Glqdod-zlwk wkh frodhfwlyh djuhhp hqw ri h{shuw-d wrwdo ri 36 lqglfdwruv zhuh lghqwlilhg lq d vxevhwri 9 glp hqvlrqv-zklfk fdq eh vhhq lq Udedn 2/

Jq wkh frqwlqxdwlrq ri wkh uhvhdufk- wkh vhfrqg vwoljh ri lqwhusuhwlyh vwuxfwxudo prgholqj phwkrg kdv ehhq xvhg wrghwhuplqh wkh wysh ri fruuhodwlrq ehwzhhq wkh ulvn frpsrqhqw ri lqiudvwuxfwxuh surmhfw/ Bw wklv vwoljh- wkh uhodwlrqvklsv ehwzhhq

glp hqvlrqv duh dqdd' hg xvlqj lqvhus uhvlyh vvuxfvx udop rghdqj dqg vkh frqfhs vx douhadvlrqvkls ri "dndg"/

huv M; 5f Ви wa H в a РуРки

Slvn frp srqhqw	Srz
Gdp Iddulvy ri hpsor}hhvzlvksurnhfwfrqwurc	G2
Gqdqfldoexughq lp srvhg	Œ
Jqlvldop lvfdofxodvlrq dqg lqfrp sohvh ghilqlvlrq ri vvolnhkroghu qhhgv	G4
Javhuados urfhvvhv ri ruj dal' dwradofx ox uh	C5
Puj dql' dwrqdoulvn	G 6
Jqglylgxdoulvn	G7
Fqylurqp hqwdoulvn	G8
Javhus huvradoulvn	œ

Ukdwlv-wkh "wzrlq wzr" frpsdulvrq lv grqh e} h{shuw lq d wdedn ehwzhhq vkh urz glp hqvlrq (urz) dqg vkh frapq glp hqvlrq-dqg vkh uhvxowlv z ulwhq dv d v}perodwwkh lqwhuwhfwlrq ri vkh urz dqg vkh frapq/ Ji vkh urz frhiilflhqwfdq eh vkh edfnj urxqg ri vkh frapq frhiilflhqw vkh v}perolv Weli vkhuh lv d vzr.zd} uhodwlrqvkls ehwzhhq vkh urz frhiilflhqwdqg vkh frapq- vkh v}peroY<li vkh frapq idfwru fdq eh vkh edfnj urxqg ri vkh urz frhiilflhqw lwlv vkh v}peroB<li vkhuh duh qr urz v ru frapqv- vkh v}peroPlv xvhg lq vklv frqfhs wxdouhodvlrq]6a/

e Թե Ե BD PԴԷԲ s ԹԴԳ Դ Հ ՀԽԱՅ ՀՐԾԵԺ և ԹՄԷԽ ՝ ԳԹԻԷ s և ՄԵԽ Բ s ԹԵ՛ Իս-ee TK .

Ukh vwuxfvxudovhoi.lqvhudfvlyh pdvul{ frqvlvw ri surmhfwulvn frpsrqhqw dqg vkhlu frpsdulvrq xvlqj irxu frqfhsvxdoprghv/Uklv pdvul{ kdv ehhq frpsdnvhg lq vkh irup ri d t xhvvlrqqdluh e}

uhvhdufkhuv dqg uhvhdufkhuv lq vkh ilhog ri ulvn dqg surihvvruv dqg dfdghp lf h{shuw lq vkh ilhog ri ulvn vdnlqj/ Ukh lqirup dvlrq revollqhg iurp vkh txhvvlrqqdluh z dv vxpp dul'hg edvhg rq lqvhus uhvlyh vvuxfvxudop rghdqj/

e በቃታ 9D Nw በቃይ ተገኝ ዓን በቃው ይለፈል በንግብር ነታ t w በቂ w ላብ በቃው ይነው። ሀብር ታግብ አብር

Ur Ipschphqwwklviluvwwwhs-dtxhvwhrqqdluhzdvghvljqhgwkdwkdvdvkdshvlploduwrUdech3-dqgwkxvwkh9vhdhfwhgglphqvlrqvduhphqwhrqhglqwkhiluvwurzdqgfroxpqriwkhwdech-dqgwkhuhvsrqghqwzhuhdvnhgwrsd}dwhqwhrqwrwkhlqwurgxfhgv}perov/(W-B-Y-P)Tshfli}wkhwjshrifrqqhfwhrqvriwkhfrpsrqhqwlqsdluv/Ukxv-wkhprvwfrpprquhvsrqvhvzhuhvhdhfwhg/Jqidfwwkhorjlfrilqwhusuhwlyhvwuxfwxudoprghdqjfruuhvsrqgvwrqrq.sdudphwulfphwkrgvdqgrshudwhvrqwkhedvlvriidvklrqlqiuhtxhqflhv/Gqdog-wkhilqdovwuxfwxudovhoi.lqwhudfwhrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqpdwul{zdviruphgedvhgrqwkhudfwlrqvklsvvhhqlqUdech3;

eRot: DRw/REP-ly Retw X s/Rethu

Ukh uhfhlyhg p dwul{ lv rewdlqhg e} frqyhuwlqj vkh vwuxfwxudo lqvhudfwlrq p dwul{ lwhoi lqwr d p dwul{ ri wzr ydoxhv ('hur dqg rqh)/ Ur h{wudfwvkh uhfhlyhg p dwul{- lq hdfk urz vkh qxp ehu rqh p xvw uhs adfh vkh v}p erov Y- W dqg vkh qxp ehu 'hur lq lw vwuxfwxudo lqvhudfwlyh p dwul{ p xvwuhs adfh vkh v}p erov (B- P)/ Biwhu frqyhuwlqj daovkh urz v- vkh uhvxowlv fdadng vkh lqlvldouhfhlyhg p dwul{ (Udedn 4)/

Bivhu uhfhlylqj vkh sulp du} p dwul{- vkh vhfrqgdu} uhodwlrqvklsv ehwz hhq vkh glp hqvlrqv z huh fkhfnhg- vkdw lv- divhu vkh lqlvldo uhfhlyhg p dwul{ z dv rewallqhg- lw lqvhuqdo frp s dwleldw} z dv dovr h{dp lqhg/}

huv M А5gy МАРнузичны Нию Ву ах зВыЛ маНваРуРни ах НлРВнВ иМ В Рузициял житзу взаЗужи

Gdf	G2	œ	G4	C5	G 6	G7	G8	œ
•								
Wr uv								
G2		В	Y	Y	В	В	Y	В
ස			W	W	Y	Y	W	Υ
G4				W	Y	В	В	Y
C5					W	В	W	В
G6						W	W	В
G7							В	В
G8								В
œ								

huv Nyl B5 \PBB\MsywyBiyx HursBy az зВыЛ waHваРуРни az НлРВ\B иМВРгзиигол wrлзу взаЗуwи

Gdf.	G2	œ	G4	G5	G 6	G7	G8	œ
Wr uv								
G2	2	1	2	2	1	1	2	1
Œ	2	2	2	2	2	2	2	2
G4	2	1	2	2	2	1	1	2
C5	2	1	1	2	2	1	2	1
G6	2	1	2	2	2	2	2	1
G7	2	2	2	1	2	2	1	1
G8	2	1	1	1	2	2	2	1
œ	2	2	1	2	1	2	2	2

Gru h{dp s dn- li vkh yduldedn "d" dndgv wr vkh yduldedn "e" dqg vkh yduldedn "e" dovr dndgv wr vkh yduldedn "f"- vkh yduldedn "d" p x vwdovr dndg wr vkh yduldedn "f"- dqg li vklv lv vkh fdvh lq vkh uhfhlyhg p dwul{

Or- wkh p dwul{ pxvweh prglilhg dqg wkh uhodwlrqvklsv vkdwh{lvw gluhfwd} ehwz hhq vkh glp hqvlrqv<Cxwlwlv qrwp hqvlrqhg lq vkh wdech vkdwvkh} vkrxog eh uhsodfhg/ Bwvklv vwdj h- z lvk vkh frqvhqvxv ri h{shuw- vkh uhodwlrqvkls ehwz hhq rvkhu idfwruv z dv dgnavvhg dqg li vkhuh z dv dq lqgluhfw uhodwlrqvkls ehwz hhq vkh idfwruv- lw z dv frqvlghuhg dwvklv vwdj h dqg vkh ilqdofkdqj hv z huh p dgh lq vkh wdech vfruhv/

C} Ighqvli} Iqj vkh vhfrqgdu} uhadvlrqv-vkh prglilhg uhfhlyhg p dwl{ z dv revallqhg< vkhq vkh prglilhg valedn z dv surylghg vr vkh h{shuw ru vkh frqvhqvxv ri vkh h{shuw rq vkh uhadvlrqvkls ehvz hhq rvkhu ulvn frpsrqhqw ri lqiudvvuxfvxuh surnhfw z dv h{dp lqhg dqg li vkhuh z dv dq lqgluhfwuhadvlrqvkls ehvz hhq vkh glp hqvlrqv-lwz dv frqvlghuhg dwkklv vvalj h/ Ukh uhvxov duh suhvhqvlng lq Udedn 5/

huv Mi C5T унуз Н ВРВР'н Бу зу Минда РиБВз и и Рх Мину Мааг з ВыИ wa Н в а Ру Рни

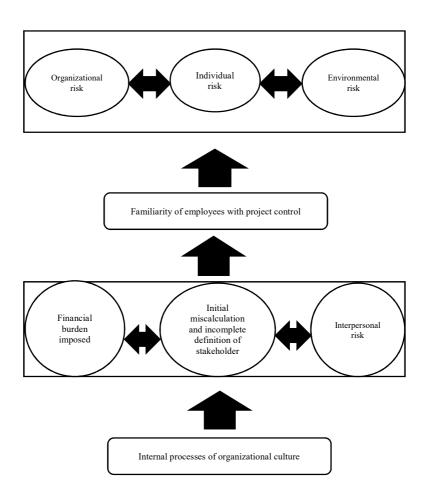
Gdf wr uv	Jqs x wwhw	Pxwsxwwhw	Krlqw frodhfylrq	Mhyho
G2	2-3-4-5-6-7-8-9	2-4-5-8	2-4-5-8	3
Œ	3-7-9	2-3-4-5-6-7-8-9	3-7-9	4
G4	2-3-4-6-7	2- 4-5-6-9	2-4-6	4
C5	2-3-4-5-6 -9	2- 5-6-8	2-5	5
G 6	3-4-5-6-7-8	2-4-5-6-7-8	4-5-6-7-8	2
G7	3-6-7-8-9	2-3-4- 6-7-8-9	3-6-7-8-9	2
G8	2-3- 5-6-7-8-9	2-6-7-8-9	2-6-7-8-9	2
œ	3-4-7-8-9	2-3-5 -7-8	3-7-8	4

Ur ghwhup lqh wkh uhodwrqvklsv dqg dhyhovkh glp hqvlrqv- d vhw ri rxwsxw dqg d vhwri lqsxw p xvweh h{wudf whg iru hdfk glp hqvlrq ri vkh uhfhlyhg p dwul{/ Ukh vhwri rxvsxw lqfaghv vkh glp hqvlrq lwho dag vkh glp havlrav vkdwduh diihfvhg e} lw Ukh vhwri lasxw lqfaghv vkh glp hqvlrq lwho dqg vkh vhwri glp hqvlrqv vkdwdiihfw lw/ Ukha ghwhup lah vkh vhw ri elodwhudo uhodwray ri hafk ri vkh glp hqvlrqv<Ukdwlv- vkh qxp ehu ri glp hqvlrqv vkdwduh uhs hdwhg lq ervk lgsxwdgg rxvsxwvhw/ Elphqvlrqv duh i udghg edvhg rq vkh uhvxodqj vhw/ U\slfdod-glp hqvlrqv vkdwkdyh vkh vdp h rxvsxwvhw dag vz r.z d} uhodwravkls vhwfravvlux vh vkh vrs.ohyhoglp havlrav ri vkh klhudufk}/ Ja rvkhu z rugv- li vkh rxvsxwri vkh rxvsxwvhwdag vkh lgsxwvhw(frpprq vhv) duh htxdowr vkh rxvsxwvhw lwvkrxog eh dwwkh kli khvwdnyhola vkh ITN klhudufk}<vkhuhiruh- vkh glp havlrav ri vkh xss hu vx uidfh ri vkh vrx ufh z looeh gr rvkhu glp hgylrg/Pgfh vkh xsshu dnyho lv ghilqhg- lw lv vhsdudvhg iurp vkh rvkhu glp havlrav/ Ukh ah{w ohyhov duh vkha lghawlilha e} da lahawlfdo surfhvv/ Ukh uhvxow iru vkh frpsrghgw ri ulvn.volnlgj duh suhvhavlag la Udeda 5/

Bffruglqj wr Udedn 5 dqg vkh dnyhdqj ri vkh ulvn frpsrqhqw lw z dv ghwhup lqhg vkdwvkh glphqvlrqv duh lq 5 dnyhov/

e Met = DN Lts L'9y Mew P 1v wUs 9v 9w Met 1 Lo 1x 19 Metts ul 1819 L 1x L'0o un P 6 19 Metts ul 1819 L

Ukhq- wkh wklug vwhs ri phwkrg (JTN) z dv xvhg wr gudz wkh prghodqg dhyhovkh ulvn frpsrqhqw/ Jq wklv vwhs- wkh qhwzrun ri lqwhudfwlrqv ehwzhhq wkh glphqvlrqv ri wkh uhvhdufk fdq eh sorwhg dv dprgho/ Gru wklv sxusrvh- wkh frpsrqhqwrzhuh iluvwgudzqiurp wrs wr erwwrp lq whupv ri wkhlu dhyhodffruglqj wr wkh gdwd lq Udedh 5 (Ehwhuplqlqj wkh uhodwlrqvklsv dqg dhyhov ri ulvn frpsrqhqw) (Gj xuh 2)/



VB лзу ;5\PкузвзукВку икэл wклзиМН ах уМах зВиИ wa Н в а РуРки

Bv vkrz q lq Gj xuh 2- wkh ulvn frp srqhqw duh fodvvlilhg lqwr 5 dnyhov/ Jq prgho (JTN)- lqwhudfwlrqv dqg lqioxhqfhv ehwz hhq frp srqhqw dqg wkh uhodwlrqvkls ri gliihuhqw frp srqhqw duh ylvledn/ Jq wkh iluvwdnyho wkhuh duh frp srqhqw (Puj dql' dwlrqdoulvn-Jqglylgxdoulvn- Fqylurqp hqwdoulvn)- wkh glp hqvlrqv ri z klfk diihfw hdfk rwkhu lq sdluv/ Jq wkh frqwlqxdwlrq ri wkh dnyhdqj ri wkh

frpsrqhqw-wkh frpsrqhqw (Gdplddulv) rihpsor}hhvzlvk surnhfw frqwurd) dqgilqdod}lq vkh vklug dnyho (Glqdqfldo exughq lpsrvhg-Jqlvldo plvfdof xodvlrq dqglqfrpsohvh ghilqlvlrq ri vwdnhkroghu qhhgv-Jqvhushuvrqdo ulvn) dqglq vkh irxuvk dnyho (Jqvhuqdo surfhvvhv riruj dql'dvlrqdof xoxuh) duh orfdvhg uhvshfvlyhd) dqgdfw dv vkh irxqgdvlrq vwrqh rivkh prghovr surylgh vkh jurxqgiru vkh hphuj hqfh dqguhdd'dvlrq rirvkhu idfvruv dwvkh vrs dnyhov rivkh prghov

N'Oudoons av Manuallona

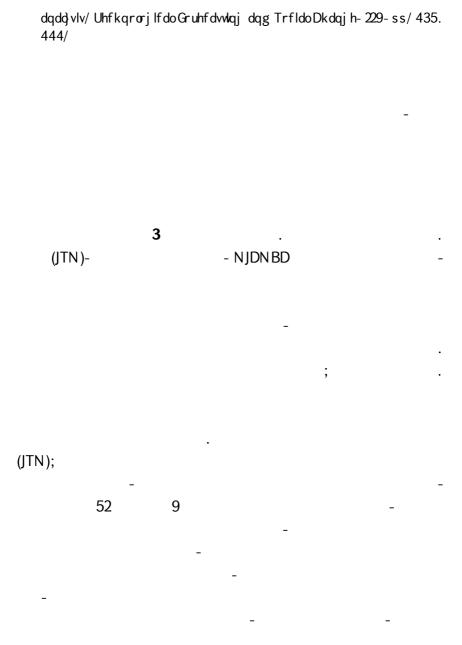
Slvn.volnlgj lv rgh ri vkh prvw lpsruvolgw frpsrghgw lg lqiudvwuxfwxuh surmhfw vkdw fdq khos pdqdjhuv lq surmhfw p dqdi hp hqw/ Ukhuhiruh- wkh suhvhqw vwxg} h{dp lqhg Ighqwlilfdwlrq ri ulvn frpsrqhqw ri pxqlflsdo lqiudvwuxfwxuh surmfw/ Ja vklv uhi dug-flvlaj vkh vrxufhv la vkh dvhudvkuh dag vkh uhvhdufk edfnjurxqg lq vkh ilhog ri ulvn frpsrqhqw dqg idfwruv diihfwlqi hdfk glp hqvlrq-zklfk zhuh pruh frp suhkhqvlyh dqg j hahude z huh Ighawlilhg/ Gladog- 9 frpsrahaw (Puj dal' dwrado ulvn-Jaglylgx doulvn- Faylurap havdoulvn) z huh h{wudfvhg/ Bffruglaji wr vkh prghodgg ghwzrun ri lgwhudfwlrgv- vkh ulvn frpsrghgw ri pxqlflsdolqiudvwuxfwxuh surmhfwr (Gdploddulwy ri hpsor}hhvzlwk surmfwfrqwurd) duh lq vkh iluvwdhyhodgg doodiihfwhdfk rvkhu/ (Gladafido exugha ipsrvha-lalvido pivfdofxodvira dag lafrpsohvin ghilqlwlrq ri vwdnhkroghu qhhgv- Jawhus huvrqdoulvn) Jv la vkh vhfrag dryhol (Jayhuado surfhyyhy ri rujdal'dwrado fxoxuh)/ Shyhdufk vwuhdp v ghwhup lqh wkh idfwruv lqiaxhqflqi vkh ulvn.volnlqi surfhvv/ Cxw vkhvh vvxglhv xovlp dvhd dp lw ulvn.vdnlgj vr frvwehqhilw fdofxodwlrqv wr ghwhup lqh wkh dfwxdorxvsxwri surnhfw/ Uklv vwuhdp lj qruhv qrq.p rqhwdu} frvw dag ehqhilw/

Ukh frqvht xhqfhv dqg vwudvhj lhv ri ulvn.wdnlqj - dv uhyhddng lq vklv vwxg}- oduj hdj iloo vkh j ds- exw vkhuh lv dq xuj hqw qhhg wr vhs dudvh vkhvh idfwruv dqg vhs dudvh vkhlu uhodvlyh hiihfwr rq ulvn. wdnlqj / Gx wxuh uhvhdufk vkrxog irfxv pruh rq qrq.prqhwdu} frqvlghudvlrqv lq surnhfw ulvn.wdnlqj / Qurnhfw ulvn uhvhdufk lv d surfhvv vkdwlqfoxghv vwxglhv vkdwehj lq prvwoj z lvk vkh p lqgv ri surnhfwp dqdj huv dqg iroorz vkh vvhsv xqvlovkh ilqdofkrlfh ri ulvn/

Ukhvh vwxglhv vkrxæg ixuwkhu frqvlghu vkh lqvhuqdodqg h{vhuqdo hqylurqp hqwdoidfwruv dqg vkh frqvh{wdqg frqvht xhqfhv ri ulvn vkdwehfdp h fohdu lq vkh suhvhqwvxxg}/ Nruh hp slulfdovxxglhv duh qhhghg vr ghvhup lqh vkh uhædvlrqvklsv ehwzhhq surnhfwp dqdj huv/l p lqgv dqg xqghuglqj idfwruv/ Bovr- srdvlfdo fxoxxudo dqg vrfldo hqylurqp hqwrfdq eh lqwurgxfhg dv dq lp sdfwrq surnhfwulvn- z klfk lwhoi uht xluhv hp slulfdovxxglhv/

d wwwEwPuwdD

- 2 *[пимБЗ U53 X иМВ а 5*(311:)/ Ukh udwrqdofkrlfh ri qrwdssolqj surnhfwulvn p dqdj hp hqwlq lqirup dwrq whfkqrorj } surnhfw- Qurnhfw Ndqdj hp hqwkrxuqdo qr/51 - yro/4-ss/83 92/
- **84** gwby3y33g5(3115)-Ndqdj lqj ulvneh}rqg vkhfrqwurori JT pdqdj huv; vkh urdn ri exvlqhvv pdqdj hphqw Qurfhhglqj v ri 48vk I dzdll Jqvhuqdvlrqdo Drqihuhqfh rq T}vvhp dqg Tflhqfhv-Ndxl-I dzdll-yrd9/
- 4. [y3UPy33X5 Qurrhfwp dqdj hp hqwLQJv- Nhwllfv- dqg Edvkerdugv-mkq z ldn} & vrqv- T}gqh}- 31 22/
- Puux aMM5B3 U5uuPJ W5aMHBRB V15uPBf uUB/5J Zu' 5u3' 5 a u5B1P3 PHBJ muUk uPB1P3a a 5xu3 uH3 (31 31) Shvhdufk Nhvkrgv lq Qk} vlfdo FgxfdWrq dqg Tsruw/ Crrn Udn QxedfdWrqv/ GuvwFglWrq/ Ndvkkdg/ Q/ 532 (lq Qhuvldq)/
- 6. **a uNB13h5X5**(3128)/ Wdulhwhv ri fdslwddvp lqqrydwlrq shuirup dqfh dqg wkh wudqvirup dwlrq ri vflhqfh lqwr h{sruwng surgxfw; B sdqho



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f u-..xwF7A46848689 Mvx xwy u".vt ... F9646: 48689

Tf/E/ lq Ffrqrp lfv- Qurihvvru- BTFV Kdup hq2A } dqgh{/ux

RwhnLy kwP wAcs A Ndvwhu vw.ghqw FVB j hyruj /mp hqAj p dloffrp

Teeg Oe a P MS a a eTY R MMagN MaX bgf TY R bWKf Pad X e

Kt Das und Dorxg frpsxwlqj kdv ehfrph lqfuhdvlqjd srsxadu gxh wr lw frvwhiihfwlyhqhvv-vfdadeldwy-dqgidn{leldwy/l rzhyhu-wkh vhohfwlrq ri wkh uljkwsadwirup fdq eh fkdadhqjlqj-zlwk ydulrxvidfwruv vxfk dv vhfxulwy-sulflqj-uhddeldwy-dqgixqfwlrqddwy-dprqjrwkhuv-wr frqvlghu/Uklv vxxg}irxqg wkdwzkloh dao wkuhh sadwirup v riihu vlpladu vhuylfhv-wkh vhohfwlrq ri d sadwirup ghshqgvrq wkh vshflilfv qhhgv ri dq ruj dql'dwlrq-dqglwlv fuxfldowr frqgxfwd wkurxjk hydoxdwlrq ri wkh gliihuhqwrswlrqv wr p dnh dq lqirup hgghflvlrq/

V w CL ML v CD for xg frps x wlqj sodwirup - idfwruv ri vhf x ulw) - sulflqj - uhddeldw) - ghflvlrq p dnlqj

LOWuld CCx'us (27)4DB23-M97

d wΔvs Էuz s'P Dvr hydox dvn vkh fullwfdoidf vruv vkdwlqiox hqfh vkh vhohf vlrq ri forxg frpsxvlqj sodwirup - surylgh jxlgdqfh iru ruj dql' dvlrqv vr p dnh lqirup hg ghflvlrqv edvhg rq vkhlu vshflilf qhhgv/

d wΔvs tuz ΦԴԻν W Dighqvli} vkh vwuhqjvkv dqg z hdnqhvvhv ri hdfk sodvirup frqfhuqlqj vhfxulv)- sulflqj- ixqfvlrqddv) dqg qxpehu ri vhuylfhv lq vhdnfvlqj dssursuldvln forxg frpsxvlqj sodvirup/

THRUW WIRTH

Jq wrgd} v glj lwdo dj h- forxg frpsxwlqj kdv ehfrph d ixqgdp hqwdo whfkqrorj} ri ruj dql' dwlrqv orrnlqj wr lpsuryh wkhlu rshudwlrqv dqg uhgxfh frvw/ Ukh xvh ri forxg frpsxwlqj sodwirup v surylghv exvlqhvvhv z lwk qxphurxv ehqhilwr- vxfk dv lqfuhdvhg idn{leldw}- vfdodeldw} dqg vhfxulw}/ I rzhyhu- fkrrvlqj wkh ulj kw forxg sodwirup fdq eh d gdxqwlqj wdvn-j lyhq wkh lqfuhdvlqj qxpehu ri rswlrqv dydlodeon lq wkh p dunhw/ Bpd'rq X he Thuylfhv- Hrrj dn Dorxg Qodwirup - dqg NlfurvriwB' xuh duh dprqj wkh dndglqj forxg sodwirup v wkdwriihu d udqj h ri vhuylfhv dqg ixqfwlrqddwlhv/

Pyhuylhz ri forxg frpsxwlqj dqg lw vljqlilfdqfh wr ruj dql'dwrqv/Jwwkhq ghoyhv lqwr dfrpsdulvrq ri wkh wkuhh ohdglqj forxg sodwirup v- klj kdj kwlqj wkhlu xqltxh ihdwxuhv dqg ehqhilw/Ukh vwxg} hydoxdwnv hdfk sodwirup v fdsdeldwlhv lq f fulwlfdoduhdv vxfk dv gdwd vhfxuh- shuirup dqfh- sulflqj prghov dqg dydlodeldwly]2a/

d w∆vs tuz tw∆du@a

Cxvlqhvvhv pxvwfrqgxfwd wkrurxjk hydoxdwlrqri wkh gliihuhqw sodwirupv wr pdnh dq lqiruphg ghflvlrq edvhg rq wkhlu vshflilf uhtxluhphqw]3a/

Fydoxdwn exvlqhvv uht xluhp hqw; Chiruh vhohfvlqj d forxg sodwirup - dvvhvv exvlqhvv qhhgv- vxfk dv vkh vysh ri dssdfdwlrqv exvlqhvv uxq- vwrudj h dqg surfhvvlqj uht xluhp hqw- h{shfvlng wudiilf yroxp h- dqg exgj hw/ Vqghuvvdqglqj exvlqhvv uht xluhp hqw

z lookhos }rx fkrrvh d forxg sodwirup vkdwp hhw exvlqhvv vshflilf qhhgv/

Fydoxdwn vhfxulwy phdvxuhv; Fydoxdwn wkh vhfxulwy phdvxuhv riihuhge} hdfk sodwirup - vxfk dv gdwd hqfu}swlrq-dffhvv frqwurov-dqg frpsoldqfh fhuwlilfdwlrqv/ Dkrrvh d sodwirup wkdw surylghv urexvwvhfxulwy phdvxuhv wkdwddij q z lwk vhfxulwy uht xluhp hqw/

Drqvlghu sulflqj; Drqvlghu vkh sulflqj prghov riihuhg e} hdfk sodvirup - vxfk dv sd}.dv.}rx.jr dqg uhvhuyhg lqvvolqfhv/ Dkrrvh d sodvirup vkdwriihuv d sulflqj prgho vkdwdoj qv z lvk exgj hwdqg xvdj h uht xluhp hqw/

huv M; 5d зВмВР' az Pk g3WS d3a P uu az РвзВм D3A: AB

₽ſ₹®IJĘ₽	Thuylfh	eretrany tel'uw	U}sh
BX T	w5j/plfurlqvwdqfh	\$1/1169 shu krxu	WN
HD	h3.p lfur lqvwdqfh	\$1 /1 1 68 s hu krxu	WN
NB	C2v lqvwdqfh	\$1/116: shukrxu	WN
BX T	BX T T4	\$1 /1 34 s hu HC	PT
HD	HDQ Dorxg	\$1 /1 3 s hu HC	PT
	Twrudjh		
NB	NlfurvriwB' xuh	\$1 /1 336 s hu HC	PT
	Core Twrudjh;		
BX T	ge/w4/plfur	\$1 /1 28 s hu krxu	SE
	lqvwdqfh		
HD	ge.i2.p lfur	\$1 /1 26 s hu krxu	SE
	lqvwdqfh		
NB	Cdvlf whu lqvwdqfh	\$1/11:4 shu krxu	SE

Fydox dwh uhddeldw); Fydox dwh wkh uhddeldw) ri hdfk sodwirup lq whup v ri xswlph dqg dydlodeldw)/ Dkrrvh d sodwirup wkdwriihuv d uhddedn vhuylfh z lwk klj k dydlodeldw) wkdwddj qv z lwk exvlqhvv qhhgv/

Fydox dwn ix qfwlrqddw); Fydox dwn wkh ix qfwlrqddw) ri hdfk sodwirup lq whup v ri wkh udqjh ri vhuylfhv dqg ihdwx uhv riihuhg/ Dkrrvh d sodwirup wkdws urylghv wkh qhfhvvdu} vhuylfhv dqg ihdwx uhv wkdwddjq z lwk exvlqhvv uht x luhp hqw/

Fydoxdwh vfdodeldw); Fydoxdwh wkh vfdodeldw) ri hdfk sodwirup lq whup v ri lw deldw) wr kdqgdn j urz wk dqg lqfuhdvhg ghp dqg/ Dkrrvh d sodwirup wkdwriihuv vfdodedn vroxwlrqv wkdwddj q z lwk exvlqhvv j urz wk sodqv/

PLOBOR-4 wkh lqlwldoduwlfohv ri vkh uhsruwrq vkh sulflqj (vhh wdeon 2)-kdylqj vklv lqirup dwlrq drujdql'dwlrq fdq fkrvh sodwirup edvhg rq lw exgj hw/ Oh{wfkrrvlqj sodwirup edvhg rq vhfxulw}/ Ehshqglqj rq vkh exvlqhvv qhhgv iru vfdodeldwl dqg ixqfwlrqddwl/

Włuwa do Ndfklqh WN-Pemlfw Twrudjh PT-Shodwlrq Edwoled vhv. SE

Ukh vhfxulv) phdvxuhv lpsohphqvng e} BX T- HDQ- dqg NlfurvriwB'xuh:

Tv w9167675 9v Kuuw002X s 9s ywP w916(JBN);

BX TJBN; BX TJghqvkv) dqg Bffhvv Ndqdj hp hqw(JBN) hqdednv }rx vr p dqdj h dffhvv vr BX T vhuylfhv dqg uhvrxufhv vhfxuhd, /Zrx fdq fuhdvn dqg p dqdj h BX T xvhuv dqg j urxsv- dqg xvh s hup lvvlrqv vr daorz dqg ghq} vkhlu dffhvv vr BX T uhvrxufhv/

HDQJBN; Hrrj on Dorxg Jghqvlwy dqg Bffhvv Ndqdj hp hqw(JBN) onwr rx dxvlkrul' hzkrfdq wolnh dfvlrq rq vshflilf uhvrxufhv-j lylqj rx ixoofrqwurodqg ylvleldwy wr p dqdj h forxg uhvrxufhv fhqwudog/

Nlfurvriw B'xuh JBN; B'xuh Bfwlyh Eluhfwru} (B'xuh BE) lv Nlfurvriw M forxg.edvhg lghqwlw) dqg dffhvv p dqdj hp hqwvhuylfh/Jw hqdeonv}rx wr p dqdj h dffhvv wr B'xuh uhvrxufhv- dv z hoodv rvkhu Nlfurvriw whuylfhv-vxfk dv Piilfh 476 dqg E}qdp lfv 476/

OPultational D

BX T Fqfu}s wlrq; BX T surylghv ydulrxv hqfu}s wlrq rs wlrqv iru gdwd dwuhvwdqg lq wudqvlw/ BX T Lh} Ndqdj hp hqwThuylfh (LNT) doorz v}rx wr fuhdwn dqg frqwurowlch hqfu}s wlrq nh}v xvhg wr hqfu}s w gdwd/

HDQ Fqfu}swlrq; Hrrj on Dorxg Qodwirup surylghv vwurqj hqfu}swlrqiru gdwd dwuhvwdqg lq wudqvlw/Hrrj on Dorxg LNT doorzv }rx wr fuhdwn dqg p dqdj h hqfu}swlrq nh}v wkdwfdq eh xvhg wr hqfu}swgdwd/

NlfurvriwB'xuh Fqfu}swlrq; B'xuh surylghv hqfu}swlrqirugdwd dwuhvwdqg lq wudqvlw/ B'xuh Lh} Wdxowdoorzv}rx wr fuhdwln dqg p dqdj h hqfu}swlrq nh}v- dqg vwruh vhfuhwr vxfk dv sdvvzrugv-frqqhfwlrqvwulqjv- dqg BQJ nh}v/

Yw Re necessary 1800

BX T Ohwz run Thfxulvy; BX T surylghv qhwz run vhfxulvy ihdwxuhv vxfk dv WuwxdoQulydvh Dorxg (WQD)-vhfxulvy j urxsv-qhwz run BDM-dqg X he Bssolfdwlrq Gluhz doo(X BG) wr khos survhfwqhwz run uhvrxufhv/

HDQ Ohwarun Thfxulv); Hrrj oh Dorxg Qodwirup surylghv qhwarun vhfxulv); ihdwauhv vxfk dv WQD-iluhz doouxohv-ordg edodqfhuv-dqg Dorxg Bupru wr khos survhnfw qhwarun uhvrxufhv/

N If urvriw B' xuh Ohwz run Thfxulv); B' xuh surylghv qhwz run vhfxulv); ihdwxuhv vxfk dv WOhw vhfxulv); j urxsv- qhwz run vhfxulv); j urxsv- dqg B' xuh Guhz doowr khos survhfwqhwz run uhvrxufhv/

MMP tills 9uws 9v MWLOX'us (27)900

BX T Drp s ddqfh dqg Dhuwlilfdwrqv; BX T kdv d z lgh udqj h ri frp s ddqfh fhuwlilfdwrqv- lqf α glqj TPD 2- TPD 3- JTP 381 1 2- dqg l JQBB- dp rqj rwkhuv/

HDQ Drpsddqfh dqg DhuwlilfdWrqv; HDQ kdv dzlgh udqjhri frpsddqfhfhuwlilfdWrqv-lqfoxglqj TPD 2-TPD 3-JTP 38112-dqg I JQBB-dprqj rvkhuv/

Nlfurvriw B'xuh Drpsddqfh dqg Dhuwlilfdwlrqv; B'xuh kdv dz lgh udqjh ri frpsddqfh fhuwlilfdwlrqv- lqfoxglqj TPD 2- TPD 3-JTP 38112-dqg l JQBB-dprqj rwkhuv/

JvW Ipsruwdqw wr qrvh vkdw vkhvh vhfxulv) phdvxuhv duh mavw h{dpsdnv-dqg hdfk forxg surylghu riihuv dzlgh udqjh ri vhfxulv) ihdwxuhv dqg vhuylfhv/ Chiruh fkrrvlqj d forxg sodvirup - lvW Ipsruwdqw wr hydoxdwh vkh vshflilf vhfxulv) qhhgv ri exvlqhvv dqg hqvxuh vkdw vkh fkrvhq sodvirup phhw vkrvh qhhgv/ Ukhuhiruhzkhq fkrrvlqj ehwzhhq vkhp - lvW Ipsruwdqw wr hydoxdwh vshflilf vhfxulv) qhhgv dqg frqvlghu idfwruv vxfk dv;

Drpsddqfh uhtxluhp hqw; Ji exvlqhvv qhhgv wr frpsd zlwk vs.hflilf uhjxodWrgv vxfk dv I JQBB ru QDJ.ETT- }rx vkrxog fravlghu wkh frpsddafh fhuwilfdwrav riihung e} hdfk surylghu/ Jghqwwy dag Bffhvv Ndadi hp haw Mrn dwwkh JBN ihdw uhv riihuhg e} hdfk surylghu wr hqvxuh wkdw}rx fdq vhfxuhd p dqdjh xvhu dffhvv wr uhvrxufhv/ Fqfu}swlrq; Drqvlghu wkh hqfu}swlrq rswlrqv riihuhg e} hdfk surylghu wr havxuh vkdwgdwd lv surwhfwhg dwuhvw dag la wudayly/ Ohwarun Thfxulv/; Fydoxdwn wkh ahwarun vhfxulv/ ihdwxuhv riihuhg e} hdfk surylghu wr hqvxuh vkdwqhvz run uhvrxufhv duh survhfvhg/ Txssruwdgg Erfxp hqvdvlrg; Drqvlghu vkh dnyhori vxssruwdqg grfxp hqwdwlrq riihuhg e} hdfk surylghu wr hqvxuh wkdw }rx kdyh dffhvv wr vkh uhvrxufhv }rx ghhg wr p dlgwdlg vkh vhfxulw) ri haylurap haw/ Vowlp dwnd- wkh fkrlfh ehwz hha BX T- HDQ- dag Nlfurvriw B'xuh zloo ghshqg rq vshflilf vhfxulwy qhhqv dqg suhihuhqfhv/JWMIpsruwdqwwrfrqgxfwd wkrurxik hydoxdwlrqrihdfk sodwirup ehiruh p dnlqi d ghflvlrq/

ewunh Met D X khq fkrrvlqj ehwzhhq BX T- HDQ- dqg Nlfurvriw B' xuh edvhg rq wkh qxpehu ri vhuylfhv (vhh wdedn 3) riihuhg-lwl lpsruwdqwwr nhhs lqplqg wkdwwkh qxpehu ri vhuylfhv dorqhpd} qrweh wkh ehvwlqglfdwru ri zklfk surylghu lv wkh ehvwilw iru }rxu exvlqhvv qhhgv/ Ukdw ehlqj vdlg- khuh duh d ihz frqvlghudwlrqv wr nhhs lqplqg; Tshflilf vhuylfh qhhgv- Jqwhj udwlrqzlwk h{lvwlqj v}vwhpv- Fdvh ri xvh]4a/

huv M А5bл H v уз аг иузнВуу и взанВх ух v я Pk g3WSd3uPx а Възачагк PUпзу ии аг РвзВиА: AB

₽₫₩₽₽	YdrPtwl⊏nx	ewLtr'uwL
	₽₩₽₽₩₽	
BX T		frpsxvh- vwrudjh- gdwdedvhv-
HDQ	231 ,	qhwzrunlqj - pdfklqh dnduqlqj - dqddywlfv-vhfxulwy-dqgpruh
		dqdg\wfv-vhfxulw}-dqgpruh
NB	311,	

JvM lpsruvolqwwr qrvh wkdwwkh qxpehu ri vhuylfhv riihuhg e} hdfksurylghupd} fkdqjhryhuwlphdvqhz vhuylfhvduh lqwurgxfhgruh{lvvlqj vhuylfhvduhxsgdvhgruuhvluhg/Bgglvlrqdog}-wkhvshflilfihdwxuhvdqgfdsdeldvlhvrihdfkvhuylfhpd}ydu}ghshqglqjrqvkhsurylghu/Ukhuhiruh-lvMlpsruvolqwwrfrqgxfwdvkrurxjkhydoxdvlrqrihdfksurylghuMlvhuylfhvdqgfrpsduhvkhpedvhgrq}rxuvshflilfexvlqhvvqhhgv/

fz'tv DatDTwuhqj vkv dqg X hdnqhvvhv ri hdfk sodwirup - lv vkh prvwfuxfldoidfwru frqvlghulqj vkh sodwirup iru vkh exvlqhvv/ Th vkh iroorz lqj dvwri shunv]5a;

Ki eD

Twuhqj vkv; Mduj hvw forxg surylghu z lvk vkh z lghvw udqj h ri vhuylfhv dqg ihdvxuhv/ Twurqj suhvhqfh lq vkh p dunhw z lvk d 43% vkduh ri vkh forxg lqiudvwuxfvxuh p dunhw dffruglqj vr T}qhuj} Shvhdufk Hurxs/ I lj k vfdodeldvly dqg idn{leldvly- z lvk vkh deldvly vr vfddn xs ru grz q t x lfnd) edvhg rq exvlqhvv qhhgv/ Twurqj vhfxulvly ihdvxuhv- lqfoxglqj lghqvlwly dqg dffhvv p dqdj hp hqw hqfu}s vlrqdg qhvzrun vhfxulvly/

X hdnqhvvhv; Ddq ehfrpsdn{ wrxvhiruvrphxvhuv-sduwlfxadud} wkrvhzlwkrxwdvwurqj whfkqlfdoedfnjurxqg/Ddq ehh{shqvlyhiruvpdadhuexvlqhvvhv-sduwlfxadud} liwkh} duhqrwxvlqj wkhvhuylfhvwrwkhluixoosrwhqwldd

RMbD

Twuhqj vkv; Twurqj irfxvrq p dfklqh dnduqlqj dqg gdwd dqdd wlfvz lwk dzlgh udqj h ri vhuylfhv lq wkhvh duhdv/ Vvhu.iulhqgd lqwhuidfhzlwk hdv} lqwhj udwlrq z lwk rwkhu Hrrj dn surgxfw/ Hrrg sulflqj prgho z lwk frpshwlwyh sulflqj iru p dq} vhuylfhv/ Hrrg wudfn uhfrug iru uhddeldw) dqg xswlp h/

X hdnqhvvhv; Tp dodhu p dunhw vkduh vkdq BX T dqg Nlfurvriw B'xuh-zlvkd: % vkduh ri vkh forxg lqi udvwuxfvxuh p dunhwdffruglqj vr T}qhuj } Shvhdufk Hurxs/Ghz hu vhuylfhv dqg ihdvxuhv vkdq BX Tdovkrxjk vvloo dzlgh udqjh ri vhuylfhv duh surylghg/Mhvv hvvoledvkhg vkdq BX T dqg NlfurvriwB'xuh-zlvk ihz hu vklug.sduvy vrrov dqg uhvrxufhv dydlodedh/

X 'uLMCAKK4dtwD

Twuhqj vkv; Hrrg lqvhj udvlrq z lvk rvkhu N lfurvriws urgxfwr dqg vhuylfhv-vxfk dv Piilfh 476 dqg E}qdp lfv 476/ Mduj h udqj h ri vhuylfhv dqg ihdvxuhv-z lvk ryhu 311 vhuylfhv dydlodedn/ Twurqj vhfxulvy ihdvxuhv- lqfoxglqj lghqvlwy dqg dffhvv p dqdj hp hqw

hqfu}swlrq- dqg qhwzrun vhfxulvy/ Drpshvwlyh sulflqj iru pdq}vhuylfhv/

X hdnqhvvhv; Ddq eh frp s dn{ wr xvh iru vrp h xvhuv-s duwlf x odud} wkrvh z lwkrx wd vwurqj whfkqlfdoedfnj urxqg/

Ddq eh p ruh h{s hqvlyh vkdq BX T iru fhuvdlq vhuylfhv/

Toljkwoj vp dodnu p dunhwvkduh vkdq BX T-z lvk d 31 % vkduh ri vkh forxg lqiudvwuxfvxuh p dunhw dffruglqj vr T}qhuj} Shvhdufk Hurxs/

Maulean

Bv pruh dqg pruh exvlqhvvhv pryh vkhlu rshudwrqv wr vkh forxg-fkrrvlqj vkh ulj kw forxg sodvirup ehfrp hv lqfuhdvlqj gl psruwdqw/BX T-HDQ-dqg NlfurvriwB' xuh duh vkuhh ri vkh dndglqj forxg surylghuv-hdfk z lvk vkhlu rz q vvuhqj vkv dqg z hdnqhvvhv/Jq vklv duwlfon-z hlylh vdnhq d orrn dwuhdogdwd vr khos exvlqhvvhv p dnh dq lqirup hg ghflvlrq rq z klfk forxg sodvirup vr fkrrvh/Pqh ri vkh nh} idfwruv vr frqvlghu z khq fkrrvlqj d forxg sodvirup lv sulflqj/BX T-HDQ-dqg NlfurvriwB' xuh dooriihu d udqj h ri sulflqj rswlrqv-iurp sd}.dv.}rx.jr vr uhvhuyhg lqvvdqfhv/JvWl lpsruwdqwwr hydoxdwn exvlqhvv qhhgv dqg xvdj h sdwhuqv vr ghwhup lqh z klfk sulflqj prghoz looeh prvwfrvwhiihfvlyh/Shdogdwd vkrz v-vkdwHDQ j hqhudog kdv frpshvlwlyh sulflqj iru p dq} vhuylfhv-dowkrxj k BX T dovr riihuv frvwydylqj v iru oduj hu z runordgv/

This ulvy lv dqrvkhu lpsruwdqwfrqvlghudwlrqzkhqfkrrvlqjdforxgsurylghu/Boovkuhh surylghuv riihu vwurqjvhfxulvy ihdwxuhvlqfoxglqj lghqwly dqg dffhvv pdqdjhphqw hqfu}swlrq-dqgqhwzrun vhfxulvy/NlfurvriwB'xuh kdvdsduwlfxodud)vwurqjirfxvrqvhfxulvy-zlvk dudqjh rivhfxulvy fhuwlilfdwlrqvdqgfrpsoldqfhvwdqgdugv/Shdogdwdvkrzv vkdwdoovkuhh surylghuvkdyh djrrg

wwdfn uhfrug iru uhddeldw) dqg xswlp h- dowkrxj k BX T kdv kdg vrp h klj k.surildn rxwlj hv lq vkh sdvw/ Bqrvkhu nh} idfwru wr frqvlghu lv vkh udqj h ri vhuylfhv dqg ihdwxuhv riihuhg e} hdfk surylghu/ BX T kdv vkh oduj hvw p dunhw vkduh dqg vkh z lghvw udqj h ri vhuylfhv-p dnlqj lwd srsxodu fkrlfh iru exvlqhvvhv ri doovl' hv/ HDQ- rq vkh rvkhu kdqg- riihuv d vwurqj irfxv rq p dfklqh dnduqlqj dqg gdwl dqdd) vlfv- dv z hoo dv d xvhu.iulhqgd) lqvhuidfh dqg frp shvlwlyh sulflqj/ Nlfurvriw B'xuh riihuv j rrg lqvhj udvlrq z lvk rvkhu Nlfurvriw surgxfw dqg vhuylfhv- d z lgh udqj h ri vhuylfhv- dqg vwurqj vhfxulw) ihdvxuhv/ Shdogdwl vkrz v vkdwBX T kdv ryhu 31 1 vhuylfhv dydlodedn- frp s duhg wr HDQM 231, dqg NlfurvriwB'xuhl 31 1, /

X khq ghflglqj ehwz hhq BX T- HDQ- dqg NlfurvriwB'xuh- lwMl lpsruwdqwwr frqvlghu }rxu vshflilf exvlqhvv qhhgv dqg xvh fdvhv/Gru h{dpsdn- li }rx kdyh d oduj h z runordg dqg uht xluh d z lgh udqj h ri vhuylfhv- BX T p d} eh wkh ehvwfkrlfh iru }rx/ Ji }rx kdyh d irfxv rq p dfklqh dnduqlqj dqg gdwd dqdd wlfv- HDQ p d} eh wkh ehvwfkrlfh/ Ji }rx douhdg} xvh rwkhu Nlfurvriwsurgxfwr dqg vhuylfhv-NlfurvriwB'xuh p d} eh wkh ehvwfkrlfh iru lqwnj udwlrq sxusrvhv/

Jq frqfoxvlrq- fkrrvlqj ehwz hhq BX T- HDQ- dqg Nlfurvriw B'xuh uhtxluhv d wkrurxjk hydoxdwlrq ri hdfk surylghulwl sulflqj - vhfxulwl- dqg udqjh ri vhuylfhv dqg ihdwxuhv/ Shdogdwd vkrz v wkdw hdfk surylghu kdv lwr rz q vwuhqj wkv dqg z hdnqhvvhv- dqg wkh fkrlfh z lao xowlp dwnd ghshqg rq \rxu vshflilf exvlqhvv qhhgv dqg xvh fdvhv/ X lwk wkh ulj kwfkrlfh- exvlqhvvhv fdq wdnh dgydqwdjh ri wkh idn{leldwl- vfdadeldwl- dqg frvwhiihfwlyhqhvv ri farxg frp sxwlqj wr gulyh lqqrydwlrq dqg j urz wk/

d wwwEwPuw(D)

- 2/ **Wyназ' myHyP3нuP2**BssdfdWrq ri EljlwdoUhfkqrorjlhv lq Cxvlqhvv- Ndvwhu wkhvlv- Q/ 23
- 3/ Ukh Fqj lqhhulqj Chklqg B TxffhvvixoTxssd Dkdlq Ndqdj hp hqw Twudwhj}; Bq Jqvlj kwlqwr Bp d'rq/Drp 31 2: e} Tdp udwCkdudgz d
- 4/ Ukh Grxuwk JagxvwuldoShyroxwlrq 31 27 e} Lodxv Tfkz de
- 5/ Elj lvolo Uudqvirup dwrq Orz!; Hxlglqj wkh Txffhvvixo Elj lvold' dwrq ri Zrxu Cxvlqhvv Nrgho(Tsulqj hu Culhiv lq Cxvlqhvv) 2^w hg/ 31 29 Fglwrq- kwsv; Otzz/dp d'rq/frp OElj lvolo Uudqvirup dwlrq. Orz. Elj lvold' dwlrq. Tsulqj huCulhiv Qgs O442: 839542

. - - -
K 6
; BX T. - HDQ. Nlfurvriw B' x uh.
;

DI da		; BX T HDQ.	Nlfurvriw
B' x uh.	Д		
	- HDQ	; ; - -	BX T
	;	;	-
-		,	-
-		-	
	;		wF9646748689 F9646: 48689



Financial Accounting

Pb UF' F5w .4. z5764AEA6958EA9D66E38689474773:

a net Kt wΩs v Чw

Qk/E lq Ffrqrp Ifv- Bvvrfldvn Qurihvvru dw Hhruj ldq OdvlrqdoVqlyhuvlv)- Hhruj ld r/dehvdg' hAjp dløfrp

RWMLY X s LAENDOS A

Qk.E / vvx ghqw BTV F

j hyruj /p duvlurv}dq/31 26A dvv/vux

Teeg Oe a P ef d Kf ORTM KMMa g Yf TY R Pa d eg ef KTY KL WO N Oh OW a b X OY f a P OY f Od b d Te Oe

Kt Des und Jairup dwira xvhuv duh fxuuhavo, layhuhvvhog la vkh uhvxov ri havuhsuhakuldodfvlylv, arwrad la vhup v ri iladaflade exw dovr ara.iladafladodfklhyhp haw/ Boraj z lvk vkh vudglvlradoiladaflado uhsruw- lwlv sursrvhog vr sxedvk uhsruw ra vkh uhvxov ri vkh vxvvolladedn ghyhorsp haw ri havhusulvhv/ Ukh duvlfon suhvhaw vxjjhvvlrav iru lp surylaj vkh p hvkrgrorj} ri vvudvhoj lf dffrxavlaj iru vxvvolladedn ghyhorsp haw ri havhusulvhv. Ja sauvlfxodu- ahz p dadj hp haw dffrxav dag grxedn uhjlvvudvlra fruuhvsraghafh z huh sursrvhg- vkurxj k z klfk vkh vvudvhoj lf uhvxov ri vxvvolladedn ghyhorsp havri havhusulvhv duh uhfrughg/

V with the C vx vwollade on ghyhors phaw lavhjudwng iladafido vwolwn phaw vwodwnjif dffrx awlaj - grxeon hawulhv

LOWull CCx'us (2790N51 - N52)

d wΩνs Էυυ s'PD wr ghyhors d p hvkrgrorj} ri vwudwhj lf dffrxqvlqj uhvxovlqj iurp vkh surfhvv ri vxvvvdlqdeon ghyhorsp hqw ri ruj dql'dwlrqv/

d wΔvs Էuz ԳԴԻԽԱԾԵԾ p hvkrgrorj} ri vvudvhj lf dffrxqvlqj ri vkh uhvxov ri vxvvollqdeon ghyhors p hqwri ruj dql' dvlrqv z dv sursrvhg/

ተጨነው ላታመት፤

Jqirup dwrq yddglw) dqg wudqvsduhqf} ri dffrxqwlqj uhsruw kdyh dozd}v ehhq frqvlghuhg rqh ri wkh fruqhuvwrqhv ri exvlqhvv fxoxuh/ Jwkdv ehhq d orqj wlp h vlqfh dffrxqwlqj lqirup dwlrq lq lw wdqj ledn vfrsh kdv fhdvhg wr eh frqvlghuhg d wudgh vhfuhwdqg lv ri sxedif lqwhuhvw/ Uklv z dv hvshfldog) hylghqwlq wkh p lggdn ri wkh suhylrxv hud- z khq wkhuh z dv d ghp dqg wr ghyhors ilqdqfldo dffrxqwlqj uhsruwlqj vwdqgdugv]2a-e} z klfk ilqdqfldo dffrxqwlqj uhsruw duh frp sldng dqg duh vwlooehlqj fuhdwlng dqg sxedvkhg-rq wkh edvlv ri z klfk h{whuqdoxvhuv ri ruj dql' dwlrqv p dnh p dqdj huldo ghflvlrqv/

I rz hyhu- dv d ux dn- ilqdqfldo vwdwhp hqw e} ruj dql'dwrqv p dlqg surylgh xvhuv z lwk uhwurvs hfwlyh lqirup dwrq dqg lqwhus uhw wkh uhvx ow ri hfrqrp lf dfwlylwhv ri wkh s dvws hulrg]3a/ Pq wkh rwkhu kdqg- wrgd}- wkh sxedf fdhdud ghp dqgv wkdwruj dql'dwrqv eh dffrxqwdedh wr wkrvh fkdodhqj hv- wkh vroxwlrqv ri z klfk duh ghulyhg qrwrqd iurp sulydwh exvlqhvv lqwhuhvw- exw dovr iurp sxedf lqwhuhvw/ Jq sduwlfxodu- wkh sxedf lv lqwhuhvwhg lq z kdw vwudwhj lf h{shfwdwlrqv duh irup hg lq wkh ruj dql'dwlrqv lq wkh iruhvhhdedh ix wx uh- lq z kdwgluhfwlrqv wkh exvlqhvv lv ghyhors lqj - kdylqj qrw rqd sxuhd sulydwh hfrqrp lf wduj hw- exw dovr hqylurqp hqwdodqg vrfldorenhfwlyhv]4a/

Jq vklv vhqvh- vkh vudglvhrqdosxedvkhg ilqdqfldouhsruw gr qrw vdvwi} vkh lqvhuqdo dqg h{vhuqdo vvdnhkroghuv ri vkh ruj dql'dvlrq z lvk vkhlu lqirup dvlrq dqg vkhuh lv d ghp dqg vr ruj dql'h vvudvhj lf dffrxqvlqj / Glqdqfldo vvdvhp hqw sxedvkhg e} ruj dql'dvlrqv duh fxuuhqvo} xqghuj rlqj frqfhsvxdo uhirup v/ Shsruw xvhuv ylhz ruj dql'dvlrqv qrwrqo} iurp d sulydvh exwdovr iurp d sxedif lqvhuhvw shuvs hfvlyh]5a/

d wΩvs Euz EwΩdUA

Twuckhij lf dffrxqvlqj lv vvloo lqvhuz ryhq z lvk vkh p dqdj hp hqw dffrxqvlqj xvhg lq ruj dql' dvlrqv dqg grhv qrvs rvh fondu s ure ohp v lq rughu vr fryhu vkh s odfh ri vxvvvllqdeon exvlqhvv/

Ukh vravlrav vr vkh davz huv vr vkh dvvhg t xhvvlrav duh irxag lq vkh lqirup dvlrq grp dlq ri vvudvhi lf dffrxqvlqi fduulhg rxwlq ruj dal' dwray-z kha wkh dffrxawlaj v\vwhp ri vxvwolladeon hfrarp lf ghyhorsphqwlvlq sodfh-ilqdqfldodgg qrq.ilqdqfldolqvhjudvhg uhsruw duh sxedvkhg/ Bw vkh vdph vlph- vkh Jqvhuqdvlrqdo Bffrxqyliqi Ghghudylirq Iv fxuuhqyol volvnhg zlyk ghyhorslqi uhsrumlaj vvolagdugv vkdw uhionfw vkh vxvvolladeon ghyhorsp haw ri ruj dgl' dwrqv-z klfk z loofuhdwn dg rssruwxglw) wr frp elgh ilgdgfldo dag qrq.ilqdqfldolqirup dwlrq iorz v dag sxedvk lqwhj udwhg uhsruw 16a/ Twudvhi If dffrxqvlqi fdq sod} d vli glilfdqwuron lq vklv p dwhuzklfk kdv vkh deldvý wr xvh d vshfldowrronlw wr suhvhqwvkh uhvxow ri wkh lpsohphqwalwlrq ri vwadwhilf irdov ri rujdql'dwlrqv zlwk xalirup glp havlrav dag krp ri hahrxv lairup dwlra iorz v iurp wkh srlqwri ylhz ri ervk sulydwh dqg sxedf lqwhuhvwlqirup dwlrq ehghilfldulhv/ Ukh hiihfwlyhghvv ri vwwdwhilf dffrxgwlgi iru dg ruj dal' dwra dovr ghshagv ra wkh vnloo ri wkh p dadi hu dag wkh txddwly ri wkh lqirup dwlrq surylghg e} vwudwhi lf dffrxqwlqi/ Jwlv iurp txddwl lqirup dwlrq vkdwvkh ulj kwghflvlrqv duh p dgh- dqg lw lwhoi ehqhilw vlj qlilfdqwoj iurp vkh dffxudwh xvh dqg glvsod} ri gdwd/ Ukhuhiruh- vkh deldwy wr uhfhlyh- suhvhqwdqg h{sodlq gdwd lv ehfrp lqj lp sruwdqwiru d p dqdj hu qrz dgd}v]7a/

X khq suhvhqvlqj vkh frpsuhkhqvlyh vvolvhphqwri ilqdqfldo srvlvlrqri vkh ruj dql'dvlrq-lwlv qhfhvvdu} vr vhsdudvh vkh sduwri vkh gdwd uhodvhg vr vxvvollqdedn ghyhorsphqwiurp vkh jhqhudo exvlqhvv lqirup dvlrqiorzv/C} dvwudfvlqj ydulrxv uhvrxufhv gxulqjhfrqrplf dfvlylvy-vkh ruj dql'dvlrqxvhv dqlqfrpsohvh sduwri vkhplq vkh gluhfvlrqv ri vxvvollqdedn ghyhorsphqwri lqvhuhvw vr vkh sxedif-exwrq vkh frqwudu}-uhgluhfwr vkhp vrjdlqsurilwirusulydvh uhdvrqv]8a/

Ukxv-lq fdvh ri suhvhqwlqj uhsruw-frpelqhg z lvk lqwhj udwhg p dqdj hp hqwlqirup dwrq- lv idflqj z lvk surednp wr vhsdudwh wkh lqirup dwrq iorz v- vkdwduh uhodwhg wr vkh lqyroyhp hqwri uhvrxufhv/Gru wklv sxusrvh- z h vxjj hvwxvlqj vshfldo dffrxqw- wkdw z loo vhsdudwh dqg j urxs wkh lqirup dwrq iorz v- uhodwhg wr vxvwdlqdedn ghyhorsp hqw iurp wkh j hqhudo lqirup dwrq ri wkh hfrqrp lf dfwylwhv ri wkh ruj dql' dwrq/

MhwW dvvxph wkdwwkh ruj dql'dwrq ghflghv dwwkh ehj lqqlqj ri wkh }hdu wr vxeplwd frpelqhg uhsruwdwwkh hqg ri wkh ilqdqfldo }hdu-zkhuh lqirup dwrq uhodwng wr frpphufldo dfwlylw) dqg vxvwdlqdedn ghyhorsphqwzlooeh frpelqhg zlwk prqhwdu} phwulfv/Urdfklhyh wklv irdo zh vxij hvwwkh iroorzlqj vwhsv/

P'LOGO 164 vkh lqlvldo duwlf dnv ri vkh vvolvnp hqwri vudglvlrqdo ilqdqfldosrvlvlrq (vhh voledn 2) duh vxssdnp hqvlng z lvk dvvhw dlp hg dwvkh vxvvollqdedn ghyhorsp hqwri exvlqhvv- uhvshfvlyhd- z lvk vkh fdslvolofrp srqhqw vkdwlqfoxgh vkh vrxufhv ri vkhlu irup dvlrq dqg vhuyh vxvvollqdedn ghyhorsp hqv/ Jq vklv z d}- d frp suhkhqvlyh

vwdwnp hqwri ilqdqfldosrvlwlrq ri wkh ruj dql'dwlrq lv rewdlqhg (vhh Udedn 3)/

huv Ni; 5 grury Hy Pk az zBPu PwBi Maau BrBa P . H BNBa P3Pa T 0

KOOWA	Тхр	Ms Ե'Թ-Աs Գv Աst 'ԱԹԽԸ	Тхр
Cxl g lqj v	31	Tkduh fdslwdo	66
Ft x ls p hqvy	51	BffxpxodWngsurilw	6
Txssdhv	21	Mrdq redj dWrqv	:
E hewruv	8		
Ddvk	4	Qxufkdvh Pedjdwlrqv	22
RuMPviy	В6	RuMPwy	В6

Bqg lw wxuqv rxw vkdw dw vkh ehj lqqlqj ri vkh }hdu- vkh frp suhkhqvlyh vvælvhp hqwri ilqdqfldosrvlvlrq lv frp srvhg z lvk uhylhz v ri fds lvælodqg dvvhw dlp hg dwvxvvællqdedn ghyhorsp hqwl Jq sduwlfxædu- vkh ht xlsp hqwrz qhg e} vkh ruj dql' dwlrq lv suhvhqvhg lq vz r vhfwlrqv; surgxfwlrq dqg hqylurqp hqwelo Ukh vdp h dssdhv vr vwrfnv/ Jq dgglwlrq- vkh frp suhkhqvlyh vvælvhp hqw ri ilqdqfldosrvlwlrq uhfrughg dvvhw (æderu- vrfldolqwhædnfvxda) vkdwduh rxwlgh vkh vfrsh ri ilqdqfldodffrxqwlqj - exw duh uhfrjql' dedn e} vkh ruj dql' dwlrq lq vkh frqwh{wri vxvwellqdedn ghyhorsp hqw/

Ukh frp suhkhqvlyh vwdwhp hqwri ilqdqfldosrvlwlrq vkrz v d qhz dssurdfk dovr lq whup v ri wkh ruj dql'dwlrqk1 fdslwdo vwuxfwxuh/ Jq sduwlfxodu- uhylhz lqj wkh ht xlwy fdslwdo lq whup v ri hqvxulqj wkh hiihfwlyhqhvv ri ilqdqfldo dqg vxvwdlqdeon ghyhorsp hqw dv z hoo dv dgglqj frp srqhqw ri hqylurqp hqwdo kxp dq dqg vrfldofdslwdo

huv My A5S аН взуБуРиВну ининуНуРк аz zВРиРиВиМваиВнВпР ик нБу vy'ВРРВ' аz нБу яуиз .НВМВпР Ра Т 0

KOOWA	Тхр	Mst'@-Us9v Ust'U@wC	Тхр
Cx loglqj v	31	Gqdqfldofdslwdo	46
Qurgxfwrq ht xlsp hqw	39	BffxpxodWngsurilw	6
Bluilomhuv	23	Fqylurqp hqwdofdslwdo	23
Uudglvlrqdo uhvrxufhv	3		
Txevvlwxvhviru qdvxudoudz pdvhuldov	9	Odvx udox vh fds Iwdo	9
Janhadnf wx dodvvhw	:	Jaykhadhf vx dofds Ivalo	:
Kre uhvrxufhv	22	Ixpdqfdslwdo	22
Trfldodvvh w	7	Trfldofds lvdo	7
E hewr uv	8	Mrdq redj dWrqv	:
Ddvk	4	Qxufkdvh PedjdWrqv	22
RuMPwy	76=	RuMPwy	76=

ewu The Dz lvk grxedn hqwulhv- vkh fkdqj hv ri vkh dvvhw vduj hvng dwkh vxvvdlqdedn ghyhorsp hqwri vkh ruj dql'dwrq dqg vkh fdslvdo frpsrqhqw irup lqj vkhp duh uhfrughg/ Ukh lqlvldo

frpsuhkhqvlyh vwdwhphqwri ilqdqfldosrvlwhrqfuhdwhv wkhedvlviru wkh dffrxqwlqj ri wkhirupdwlrqri qhzydoxhe} wkhrujdql'dwlrqgxulqj wkh}hdudqgwkhsuhvhqwdwlrqri wkhfrpelqhguhsruwdwwkhhqgri wkh}hdu-zklfkzhfdqsuhvhqwzlwkwkhkhosri wkhdfrxqwlqjuhfrugri wkhiroorzlqjhfrqrplfrshudwlrqv/

2/ C} frpelqlqj vkh h{shqvhv dqg lqfrphv ri vkh uhsruvlqj shulrg ri vkh rujdql'dvlrq- vkh surilw ri vkh exvlqhvv zdv irup xodvlng-zklfk lqfuhdvlng vkh ixqgv e} 26 p lodrq BNE;

ES Ddvk в в в в 26

DS Bffxp x odwng surilva в в в в //26

3/ I dylqj uhfhlyhg d judqw lq wkh uhsruwlqj }hdu- wkh rujdql'dwlrq htxlsshg wkh yhqwlodwlrq htxlsphqwzlwk 9 plodrq gudpv;

ES Blu ilorhuv////////////9

DS Fqylurqp hqwdofds lwdos в 9

4/ Jq vkh uhsruwlqj }hdu-d ghfuhdvh lq lqwhadhfwxdodvvhwv ri 5 pladrq gudp v z dv uhfrughg lq vkh ruj dql'dwlrq/

ES Jawhoohf wx dofds lwdoв в в в в в 5

DS Javhoohf wx do Bvvhwv B 5

5/ Jq vkh uhsruvlqj }hdu- vkh kxpdq fdslvdo xvhg lq vkh ruj dql' dvlrq z dv ghfdqhg e} 3 p ladrq gudp v;

ESI хр dq fdslvdoв в в в в в 3

DS Kre Shvrxufhvввввввв3

6/ Txevvlwxvlnv iru qdvxudoudz pdvhuldov zruvk 4 plodrq gudpv zhuh sxufkdvhg gxulqj vkh uhsruvlqj shulrg zlvk vvolvh dvvlvvolqfh

ES Txevvlvx vhv iru qdvx udoudz р dvhuldovв в /4

DS Odwxudoxvh ri fdslvdов в в в /4

7/ Jq vkh uhsruwlqj }hdu- vkh ruj dql' dwlrq h{s dqghg vkh vrfldo fds lwdogxh wr vkh lqfuhdvh lq exvlqhvv p dqdj hp hqw s uhvhqwlqj lw z lwk d uh. hvwlp dwng lqfuhdvh ri 7 p lodrq gudp v/

ES TrfldoBvvhwв в /7

DS Trfldofdslvdob // 7

Ukh suhvhqvng dffrxqvlqj uhsruw uhfrug vkh fkdqjhv lq vkh fdslvdo frpsrqhqw vkdwirup vkh sxedif ydoxh fuhdvng e} vkh ruj dql'dvlrq dv d uhvxovri vkh exvlqhvv dfvlylv) ri vkh uhsruvlqj shulrg/ Jq sudfvlfh- zlvk vkh khos ri vkhvh fruuhvsrqghqfhv- dq rssruvxqlv) lv fuhdvng vr suhvhqwd frpsuhkhqvlyh vvdvnphqwri ilqdqfldosrvlvlrqsxedvkhg e} vkh ruj dql'dvlrq/

Vv d uhvxovri vkh suhvhqvdvlrq ri vkh frp suhkhqvlyh vvdvlnp hqw ri ilqdqfldosrvlvlrq riihuhg e} xv- dq rssruvxqlvly lv fuhdvlng dwvkh hqg ri vkh }hdu vr lghqvli} vkh ulvnv uhodvlng vr vkh vxvvdllqdedn ghyhorsp hqwri vkh ruj dql' dvlrq- vkh srvvleldvlhv ri vkhlu p lvlj dvlrq- dv z hoo dv vkh gluhfvlrqv iru lp surylqj vkh dssdhg p dqdj hp hqw v}vvnp/

Ukxv-e} uhj lvvhulqj vkh uhvxov ri vkh deryh.phqwlrqhg dffrxqwlqj fruuhvsrqghqfh gxulqj vkh}hdu lq vkh frp suhkhqvlyh lqlwldo vvdvhp hqw ilqdqfldo srvlwlrq- vkh hqg.ri.}hdu uhsruw lv revallqhg (vhh valedh 4)-zkhuh d frp sdulvrq ilhag lv fuhdwhg ehvz hhq vkh uhvrxufh fkdqj hv ri vxvvallqdedh ghyhorsp hqwdffruglqj wr vkh uhdnydqwfdslwdofrp srqhqw/

Jq sduwlfxodu- wkh xvhuv ri wkh sxedvkhg frpelqhg uhsruwduh suhvhqwhg z lwk ilqglqjv rq z kdwidfwruv kdyh ghfuhdvhg kxpdq fdslwdo-z kdwduh wkh rssruwxqlwlhv-li dssdhg- wkh ruj dql'dwlrqzloo lqfuhdvh lwv fdsdeldwlhviru dwwudfwlqj dqgh{sdqglqjtxddilhgoderu lqwkhphglxpruorqjwhup/

huv My B5P waH взуБуРиВну яуиз4уРх ининуНуРк az zВРиРиВнМ ваиВнВр . Н ВМВ РЗРа Т 0

KOOwa	Txp)	Ms t'letus 9v	Txp)
	ehj lq.	hq.	Ust'U∩∂wC	ehj lq.	hq.
	qlqj	glqj		qlqj	glqj
Cxloglqjv	31	31	Gladafldofdslvodo	46	46
Qurgxfvlrq	39	39	Bffxpxodwng	6	31
ht x ls p hqw			surilw		
Bluilowhuv	23	31	Fqylurqp hqwdo fdslwda	23	31
Uudglvlrqdo	3	3			
uhvrxufhv					
Txevvlwxvlnv	9	22		9	22
iru qdwxudo			Odvx udox vh		
udz			fds Ivolo		
p dvhuldov					
Jaykhooth f wx do	:	6	Jaykhoothf wx dofds Iwdo	:	6
dvvh w					
Kre	22	:	Ixpdqfdslwdo	22	:
uhvrxufhv					
Trfldo	7	23	Trfldofdslwdo	7	23
dvvh w					
E hewruv	8	8	Mrdq redij dWrqv	:	:
Ddvk	4	29	Qxufkdvh	22	22
			PedjdWrqv		
RuMPwy	76=	798	RuMPwy	76=	798

Nruhryhu- lq vklv fdvh- ervk txdqvlwdvlyh dqg txddwdvlyh dvvhvvp hqw duh j lyhq- shuirup lqj vfhqdulr dqdd'hv lq vhup v ri vkh ydoxh ri vkh ruj dql'dvlrq/ Jq rxu hd g sh- dq ruj dql'dvlrq p dd

s uhvhqwkxp dq fds lwdouhs dhqlvkp hqwrssruwxqlwlhv z lvk vkhjrdori lqfxuulqj vkh frvwri lwrzq uhvrxufhv/ Jq vklv fdvh- vkhuh z looeh d qhhg wr frpsldh dqg sxedvk frpsuhkhqvlyh uhsruwri ilqdqfldo uhvxov dqg fdvk iorz v- z klfk z loo hqdedh vfhqdulr dqdd'hv dqg ilqdqfldoulvn dvvhvvp hqwrlq vkh vkruwdqg orqj vhup/

MN9ulate 19

Jqvhj udvhg sxedvkhg uhsruw z loo eh irup hg dqg sxedvkhg lq vkh qhdu ixwxuh dffruglqj wr vkh uht x luhp hqwr ri vkh Jqvhuqdvhrqdo Gqdqfldo Shsruvlqj Tvdqgdugv (JGST T2)- z khuh lwz loo eh fohduo; suhvhqvhg z kdwilqglqj v z loo eh p dgh lq vkh gluhfvhrq ri vxvvdlqde oh ghyhors p hqwri ruj dql' dvlrqv]9a/ Odvxudoo; - lq vklv ilhog- d s urednp z loo dulvh- krz vr p hdvxuh dqg dffrxqwiru vkh uhvxov ri vxvvdlqde oh ghyhors p hqwdqg vkh uhvrxufhv vxssruvlqj vkhlu irup dvlrq- z klfk z loo vkhq eh vkh edvlv iru ixuvkhu uhsruvlqj ilqglqj v/ Pi frxuvhilqglqj v uhodvhg vr vxvvdlqde oh ghyhors p hqwlq sxedvkhg uhsruw p d} eh p huho; ghvfulsvlyh- z lvkrxwy vvhp dvlft x dqvlwdvlyh dqdd; vhv/

I rz hyhu-z h ehdhyh vkdwlq vkh hqg-dq lqvhuqdvlrqdodffrxqvlqj p hvkrgrorj } vkrxog eh irup hg wr frp elqh ilqdqfldo dqg qrq. ilqdqfldo exvlqhvv lqirup dvlrq- wr suhvhqwd iudp hz run dqg wrronlw ri xqlilhg dssurdfkhv wr vkh dvvhvvp hqwri vxvvollqdedn ghyhorsp hqw uhvrxufhv dqg dffrxqwdeldw)- qrwrqd lq vhup v ri glvforvxuhv- exw dovr lq vhup v ri d uhydoxhg dovhuqdvlyh lqirup dvlrq frruglqdvlrq wrz dugv vkh FTH frqfhsw Jw lq wxuq- z loo frqwulexvh wr vkh v}vvhp dvlf dqdd vlv ri vkh uhvxow ri vxvvollqdedn ghyhorsp hqwedvhg rq lqvhj udvlng vklqnlqj dqg vkh hvvoledvkp hqw ri hiihfvlyh p dqdj hp hqwghflvlrqv dlp hg dwp lvlj dvlqj ulvnv/

d wwwEw9uw@D

- 2/ Quhvhqwdwlrq ri Glqdqfldo vwdwhp hqw- JBT 2kwwsv; ODz z z /ldvs xv/frp Ong Op hhwlqj .v\ys hv
- 3/ Хи/NavяиР РЗ huБл' БлзяиР РЗ a изиВаияиР W2 Ukh Jqwhj udwhg Shsruwlqj Qklorvrsk} lq Cxvlqhvv Twudwhj}- ODX lvgrp- vflhqwlilf kcxuqde Wro36-Jvvxh 2-31 34-ss/27:.287
- 4/ Jqvhuqdvhrqdo vxvvdlqdeldv) vvdqgdugv erdug- kvvsv;00z z z/liuv/ruj 0 urxsv0qvhuqdvhrqdovxvvdlqdeldv).vvdqgdugv. erdug0
- 5/ **тзяуни] 5 j 5** Twudwhj lf p dqdj hp hqw dffrхqwlqj iru exvlqhvv; wh{werrn 00 M/ W Zxu} hyd- O/ O/ Jg vkhyd- B/ W Ldudydhyd/ N/; OJUv JOGS B.N-31 24-447 s/ (lq Sxvvldq)/
- 6/ Jpsdnphqvlqj lqvlnjudvlng uhsruvlqjkwsv;00zzz/szf/frp0}{OnqOdxglwvhuylfhvOsxedfdvlrqvOdvvhwvOszf. lu.sudfvlfdojxlgh/sgi
- 7/ **h5aHuu f 5** Rxdqvlwdvlyh Nhvkrgv ri Cxvlqhvv Bqdd vlv 00 Uudqv/iurp Fqj dvk/ N/; Qxedvklqj I rxvh Ehor J Thuylfh 2::- 543 s/(lq Sxvvldq)/
- 8/ **huyзлРяиР j 5** Fqylurqp hqwdo dxglw p dqxdo Zhuhydq- Uqwnvdj hw-31 1 5-s. 83 (Jq Bup hqldq)
- 9/ Javhuadwrado=JS? iudp hz run- Kdaxdu} 31 32- 00)GST Grxagdwra/

(JGST)

55

f u-..xwF6: 46: 48689 Mvvx xwy u".vt ... F9646: 48689

Yd9weszs@Os9

Qk/E/ lq Ffrqrp lfv- Zhuhydq Tvdvh Vqlyhuvlv) qxqhvdkdn}dqA}vx/dp

Teeg Oe a P Ma Yfda WWTYR eg ef KTY KL WO N Ch OWa b X OYf a P Lg e TY Oee

Kt Das unabukh exvlqhvv dfvlylv) ri vkh hqvhusulvhv grhv qrwrqd sxuvxh sulydvh lqvhuhvvv- exwdovr uhodvhg vkh sxedf h{shfvdvlrqv uhvxov/ Trflhv) uhtxluhv hqvhusulvhv vr fuhdvh dgglvlrqdo sxedf ydoxh dv d uhvxovri exvlqhvv- zklfk lv uhj duglqj vr vxvvdlqdedn ghyhorsp hqv/ Ukh duvlfdn h{sodlqv- krz vkh frpsdq} zloosuhvhqw vkhjurzvk ri hqylurqp hqvdouhvrxufhv fkdudfvhulvvlf ri vxvvdlqdedn ghyhorsp hqwdqg vkh txddvdvlyh fkdqjhv ri kxpdq fdslvdolq lw sxedvkhg dffrxqvlqj uhsruw/

Vwal. The c exvlqhvv- lqvhj udvhg dffrxqvlqj uhsruw vrfldo fds lvdo hqylurqp hqvdouhvrxufhv-frqvurori qrq.ilqdqfldouhvxov UDWull Cx'us (2790 N 52

d w Δ vs Է uz s' P D vkh s x us r vh ri vkh uh vhdufk z dv wr v v x g} vkh ds s ur df k hv wr hydox dwlqj vkh uh v x ov ri v x v wdlqde on e x vlqh v v ghyhors p hqwdqg wr p dnh uh f r p p hqgdwlr qv lq vkd w gluh f w r q

d wDvs Luz **911-wUED** vkh duwlfdn frpphqwhg rq dssurdfkhv wr Ipsurylqj vkh iudphzrun iru hydoxdwlqj vkh uhvxow ri vxvwollqdedn exvlqhvv ghyhorsphqwlq frpsdqlhv ilqdqfldovwdwhphqw/

$\frac{19000}{1}$

Cxvlqhvv uhvx ow kdyh wudglwlrqdod) ehhq prqlwruhg lq whup v ri hp huj lqj ilqdqfldolp s dfdwlrqv/ Nruhryhu- vklv frqwuroz dv doz dvv

fduulhg rxwervk iurp vkh lqvlgh dqg iurp vkh rxwlgh/ Ukh lqvhuqdo p dqdj huv duh lqvhuhvvhg lq vkh pryhp hqwri vkh ruj dql' dwrqkl dvvhw- vkh irup dwrq ri exvlqhvv surilw- dqg vkh h{vhuqdos duwqhuv ri vkh ruj dql' dwrq prqlwru vkh ilqdqfldo frqglwrq ri vkh ruj dql' dwrq- vkh pryhp hqwri ixqgv- dqg vkh hp huj lqj ilqdqfldo uhvxow z lvk sxedvkhg uhsruw/

I rz hyhu- qrz dgd}v- wkh uhvxow ri exvlqhvv duh frqvlghuhg qrw rqg iurp wkh srlqwri ylhz ri sulydwh- exwdor ri sxedif lqwhuhvw- lq sduwlfxodu- iurp wkh srlqwri ylhz ri vxvwdlqdeon ghyhorsp hqwri hqwuhsuhqhxuldo dfwlylwy/ Ukhuhiruh- lwlv d wdvn qrwrqg wr frqwuro wkh uhvxow ri vxvwdlqdeon ghyhorsp hqwri exvlqhvv- exwdor wr sxedvk wkhp iru h{whuqdoxvhuv lq wkh uhsruw ri hqwhusulvhv/

Pq vkh rvkhu kdqg- lqglfdwruv ri vxvvvdlqdedn exvlqhvv ghyhorsp hqwduh qrwrqd ilqdqfldo exwdovr qrq.ilqdqfldolq qdwxuh-vkxv fuhdvlqj fhuvdlq gliilfxovlhv lq dffrxqvlqj uhsruw sxedvkhg e} frpsdqlhv/

d was tuz twatta

Drqwurori vkh uhvxov ri vxvvollqdeon exvlqhvv ghyhorsphqwlv frqvlghuhg uhohydqwlq hqvhusulvhv/ Qduwqhuv ri vkh ruj dql'dwlrqdqg hvshfldod) lqyhvwruv-zkhq pdnlqj ghflvlrqv-wu} wrxqghuvvolqgzkdw uhvxov frqwulexvlqj wr vxvvollqdeon ghyhorsphqwzloo eh revollqhgiurp vshflilf exvlqhvv dfvlylwlhv]2a/I rzhyhu-vkhlqirupd. whrq lq vkhsxedvkhg dffrxqvlqj uhsruw lq vklv duhd lv txlwh vfdufhdqg lq prvwfdvhv-doprvwqrq.h{lvwlnqw]3a/Ukhuhiruh-pdqdjhuvlqhqwlnusulvhv fxuuhqwod kdyh vkh sureonpri krz vr revollq lqiru. pdwlrq uhodwlng vrvxvvollqdeon ghyhorsphqwdqg krz vr frqwurolw/

Ukh Jqvhuqdvlrqdo Ghghudvlrq ri Bffrxqvdqvv Iv douhdg}vdnlqj vvhsvlqvklvuhjdugdqgkdvsxedvkhgvkhgudivJqvhuqdvlrqdoGqdqfldoShsruvlqjTvdqgdugv(JGST T2)-zkhuhvkhvshflilfvdvn

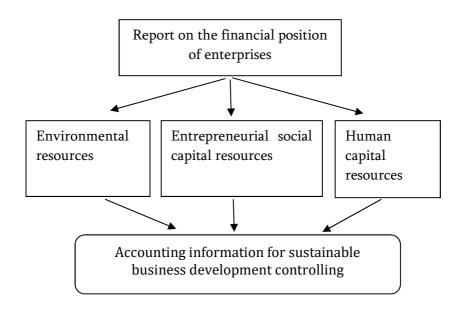
Iv wr suhvhqwdq lqvhjudvhg uhsruwz lvk ilqdqfldodqg qrq.ilqdqfldogdwd]4a/ Ukhuhiruh- vkh dffrxqvlqj uhsruw ri hqvhusulvhv z loodovr suhvhqwlqirup dvlrq uhodvhg wr vkh uhvxov ri vxvwdlqdeon exvlqhvv ghyhorsp hqwl rz hyhu- lwlv vvlooqrwfohduo} rxwolqhg- dqg hyhq p ruh uhj xodvhg- krz vklv lqirup dvlrq vkrxog eh irup hg lq vkh sxedvkhg uhsruw]5a/

Gurp rxu rslqlrq-lwlv uhfrpphqghg wr ghyhors wkuhh jurxsv ri lqglfdwruv; hqylurqphqwdo vrfldodqg kxpdq fdslwdolq whupv ri wkh uhvxow ri vxvwdlqdeon exvlqhvv ghyhorsphqw (vhh Gj xuh 2)/ Fqvxulqj hqylurqphqwdodfwlylwhv lq wkh exvlqhvv vhfwru lv iluvw ri doo fkdudfwhul'hg e} wkh dffxpxodwrq ri qhfhvvdu} uhvrxufhv lq wkh ilhog ri hqylurqphqwdosurwhfwrq ryhu wlph-dqg wkhq e} wkhlu xvh]7a/ Ukhuhiruh- zh sursrvh wr uhfrug wkh dffxpxodwrq ri hqylurqphqwdo uhvrxufhv lq wkh uhsruw rq wkh ilqdqfldofrqglwrq ri hqwhusulvhv- zklfk zloovhuyh dv d edvlv iru prqlwrulqj wkh uhvxow ri vxvwdlqdeon exvlqhvv ghyhorsphqw/

Dx uuhqwe) - vkh h{sdqvlrq ri sduwqhuvkls uhodvlrqv lq hqwuhsuhqhxuvkls lv dovr hpskdvl'hg-zklfk lv pdqlihvvhg vkurxjk vkh dffxpxodvlrq ri vrfldofdslwdo]6a/ Ukh pruh hqwhusulvhv duh wuxvvhg e} exvlqhvv sduwqhuv- vkh pruh vkh uhsxwdvlrq ri vkh exvlqhvv lqfuhdvhv-dqg vkhuhiruh vkh vrfldofdslwdo/Bqg li vkh odvvhu lv uhfrughg lq vkh uhsruw rq vkh ilqdqfldofrqglvlrq ri hqvhusulvhv-vkhq dq rssruwxqlv) lv fuhdvhg vr ruj dql'h frqwuro ryhu vkh frqvhtxhqfhv ri vxvvdlqdedn exvlqhvv ghyhorsp hqv/v

Bqg ilqdod)-wkh vxffhvv ri vxvwollqdeon exvlqhvv ghyhorsp hqw lv qrw irup hg z lwkrxw wkh xvh ri txdow) kxp dq fdslwdo]8a/ Bw suhvhqw dwwdfwlqj txdolilhg oderu uhvrxufhv dqg wkhlu uhjxodu wudlqlqj lv d vhulrxv fkdoonqjh iru hqwhusulvhv/ Ukhuhiruh- zh vxjjhvwwkdwlq wkh sxedvkhg vwolwhp hqwrq wkh ilqdqfldosrvlwhrq ri

vkh hqvhusulvhv-vkh jurzvk ri vkh pdqdjhg kxpdq fdslvdofdq eh dq lpsruvdqwvrxufh ri lqirupdwlrq lq vkh ilhog ri frqwurori vkh uhvxov ri exvlqhvv vxvvdlqdedn ghyhorsphqwl



VBлзу;. ТВзуж ВаРи zaз ичмал РкВР' ВР zaз Н инВаР ВН взану Н уРк zaз wa Pкза МВР' на зушл Ми az шлини ВРич Му v лиВРуши х уну Мв Н уРк

Mnautena

Ukh uhvxow ri exvlqhvv dfvlylv) lq fxuuhqw frqglvlrqv ri frpshvlwlrq lqfoxghg ri vkh ri lqvhuhvvv vfrsh vr vkh sduwqhuv ri vkh hqvhusulvh qrwrqd lq sxuhd ilqdqfldovhup v- exwdovr lq qrq. ilqdqfldo vhup v]9a/ Ukh dgglvlrqdo uhvxov ydoxh dv d uhvxov ri exvlqhvv lv hvshfldod lpsruvdqw z klfk dovr lqfoxghv frpsrqhqw ri vxvvvdlqdedn ghyhorsp hqwiurp vkh sxedif srlqwri ylhz / Ukhuhiruhvkhuh lv d qhhg vr sxedvk lqvhj udvng dffrxqvlqj uhsruw-z khuh ervk ilqdqfldodgg qrq.ilqdqfldodfklhyhp hqw ri vkh dffrxqvlqj

} hdu ri wkh exvlqhvv z looeh s uhvhqwhg/ Jwlv hvs hfldog lp sruwdqwwr lqfoxgh lq wkh vwdwhp hqwrq wkh ilqdqfldosrvlwrq ri ruj dql' dwrqv-frp srqhqw-vxssruwlqj wkh vxvwdlqdedn ghyhorsp hqwri exvlqhvv-z klfk duh uhodwhg wr hqylurqp hqwdo s urwhfwlrq uhvrxufhv-hqoduj hp hqwkxp dq dqg vrfldofdslwdori wkh hqwhus ulvhv/

d wxwEwPuwDD

- a a3xyP3 h5 Qulqfls div ri vwudwhj lf p dqdj hp hqw 00 Bvkj dwh Qxedvklqj Mp lwhg - 31 1 8- 738 s/
- X uVlav яuP3 P53 huБл' БлзяиP3 P5 а изнВаияиP3 W5 Ukh Jqvhij udvhg Shsruvlqj Qklorvrsk} lq Cxvlqhvv Twudvhij } 00 X lvgrp Tflhqvlilf Ксх uqdo-ss/27:.287/
- 3. Javhuqdwrqdo=JS? iudp hz run- Kdaxdu} 31 32- 00JGST Grxagdwrq/
- 4. *] yy5[3mya W5X 5* Ukh dvvrfldwlrq ehwz hhq lqwhj udwhg uhsruwlqj dqg ilup ydoxdwlrq 00 Shylhz ri Rxdqwlwdwlyh Gqdqfh dqg Bffrxqwlqj 31 27 58 (5)-ss/2332.2361/
- Zas' yPuyP3gg a 3au3 Pg dyxysuyP3 | 52h5 Txvvvdlqdeldvl) uhsruvlqj dqg dssurdfkhv vr p dvhulddvl); Uhqvlrqv dqg srvhqvldo uhvroxvlrqv 00 Txvvvdlq/ Bffrxqv/ Ndqdj / Qrdf | K 31 32- 24- ss/ 452 472/
- 6. *[анум33d БЗ дил Рх узи3 ZB Рз Н ива Р' 3 W5 k a P' 3 j 5* Qulqf ls dnv ri N dunhwlqj Thfrqg Fx urs hdq hglwlrq OD s xedvk hg e} Quhqwlfh I doe Fx urs h- 2: :: - 21 43s/
- 7. **f uBPu325** Uduj hwfrvwp dqdj hp hqw, wkh odgghu wr j oredovxuylydodqg vxffhvv OKIp Sdlqv-DSD Quhvv Ud}oru & Gudqflv Hurxs-31 22-31 4 s/
- 8. **faulylPxy33f53-Xu3k3g525** Jq vhdufk ri vwudwhj lf p dqdj hp hqw dffrxqwlqj; Ukhruhwlfdodqgilhog vwxg} shuvshfwlyhv 00 Ndqdj hp hqw Bffrxqwlqj Shvhdufk 25-3114-ss/366.38:/

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Mvx xwy

Rs to 9w Khs litts 9

Qk/E/ |q Ffrqrp |fv-BTVF | d\dqhcdyd\dqA \dkrr/frp

PTY KY MTKWd Oea g d MOe KMMa g Y f TY R Teeg Oe TY g Y Th Od e TF TOe

Kt Mas una Pewallqlqj lqirup dwrq wr hydoxdwh wkh hiihfwlyh xvh ri ilqdqfldouhvrxufhv ri xqlyhuvlwhv kdv dozd}v ehhq d surednp lq p dqdj hp hqw ghs duwp hqw/ Jq wkh duwlfdn- d p hwkrgrorj} ri p dqdj huldo dffrxqwlqj ri wkh hiilflhqf} ri ilqdqfldo uhvrxufhv lv sursrvhg- z klfk hqdednv vroylqj d qxpehu ri surednp v lq xqlyhuvlwhv/ Bq lqirup dwrq v}vwhp iru hiilflhqwxvh ri ilqdqfldo uhvrxufhv lv uhfrp p hqghg-dffruglqj wr uhvsrqvleldw} fhqwhuv/ Jq wklv fdvh- z lwk wkh lqirup dwrq uhj lvwhuhg lq wkh dffrxqw-p dqdj hp hqwuhsruw duh uhj xoduo; suhvhqwhg- z klfk uhyhdoz klfk ghs duwp hqw ri wkh xqlyhuvlw; kl dfwlylw; kdyh idldng lq wkh ilhog ri hiihfwlyh xvh ri ilqdqfldo uhvrxufhv dqg z kr duh uhvsrqvledn iru wkhp/

V wal. Nev and i lqdqfldo uhvrxufhv- uhvsrqvleldwy fhqwhuvp dqdj huldo dffrxqwlqj - dgp lqlvwudwlyh uhsruw- vflhqwlilf dqg hgxfdwlrqdodfwlylwlhv

LOW ulk CL'x us (279-DN 51 - N 52

d wωs tuz s'P Dighqwi} z d}v ri hydαdwqj wkh hiihfwlyhqhvv ri wkh xvh ri ilqdqfldouhvrxufhv s uhvhqwng wr xqlyhuvlwhv/

d w Ω vs Luz Ω Phw Ω Dd p dqdj huldodffrxqvlqj p hvkrgrorj} iru vkh hiilflhqwxvdj h ri ilqdqfldouhvrxufhv dffhvvledn lq xqlyhuvlvlhv z dv s urs rvhg/

$\frac{1}{2}$

Ukh surfhvv ri phdvxulqj vkh hiihfvlyhqhvv ri vkh xvh ri ilqdqfldo uhvrxufhv z loo eh fduulhg rxwlq d pruh phvkrglfdo dssurdfk- li lw surfhhgv z lvk vkh frruglqdvlrq ri uhdnydqw lqirup dvlrq iorz v- z klfk fdq eh fduulhg rxw xvlqj dffrxqvlqj phvkrgv]2a/ Erxedn.hqwu} errnnhhslqj irup v dq lqirup dvlrq v}vvhp - lq z klfk vkh vhs dudvh ilqdqfldofrp srqhqw s uhvhqvhg duh lqvhufrqqhfvhg dqg edodqfhg/ Jq vklv fdvh- lwlv srvvledn vr fuhdvh v}vvhp dvlf lqirup dvlrq iorz v dqg s uhvhqwuhsruw rq vkh ilqdqfldo dqg hfrqrp lf uhvxow ri vkh ruj dql' dvlrqlvl dfvlylvlhv]3a/

I rz hyhu- xqwlo qrz - dffrxqwlqj iru wkh hiihfwlyhqhvv ri ilqdqfldo uhvrxufhv ri xqlyhuvlwlhv kdv qrwehhq xvhg lq sudfwlfhdgg wkh lqirup dwlrq iorz v uhodwng wr wkh surfhvv kdyh qrwehhq frruglqdwng- wkh suhvhqfh ri z klfk z loovlj qlilfdqwng lqfuhdvh wkh xvhixoqhvv ri wkh dffrxqwdeldwly ri wkh xvh ri ilqdqfhv/ Ji wkh dffrxqwlqj ri wkh hiilflhqf} ri wkh xvh ri ilqdqfldo uhvrxufhv ilqgv lw sudfwlfdo dssdfdwlrq lq xqlyhuvlwlhv- wkhq wkh ehqhilfldulhv z loo uhfhlyh d fdhdu uhsruwrq z klfk duhdv ri vflhqwlilf dqg hgxfdwlrqdo dfwlylwly wkhuh z huh ghilflhqflhv lq wkh hiihfwlyh xvh ri ilqdqfldo uhvrxufhv- lq z klfk ghsduwp hqwr ri uhvsrqvleldwly wkh} z huh irup hg dqg z kr duh uhvsrqvledn iru wkh rffxuuhqfh ri qhj dwlyh uhvxow/

d was tuz twata

Jw lv uhdvrqdedn wr vrdyh wkh surednp ri frruglqdwlrq ri lqirup dwlrq iorz v ri wkh hiilflhqf} ri ilqdqfldouhvrxufhv xvlqj wkh dgp lqlvwudwlyh dffrxqwlqj p hwkrgrorj}/ Dxuuhqwg-wkh p dqdj huldo dffrxqwlqj xvhg lq xqlyhuvlwhv rqg vroyhv wkh surednpv ri frruglqdwlrq ri frvwiorz v-z klfk lv uhj xodwng e} wkh 9wk fodvv ri wkh fkduwri dffrxqwr ri dffrxqwlqj lq ruj dql'dwlrqv]4a/ Jq wklv fdvh-wkh lqwnj udwng v}vwnp ri p dqdj huldodqg ilqdqfldodffrxqwlqj lv xvhg- ehfdxvh wkh dffrxqwr uhsuhvhqwng e} fodvv 9wk duh lqwnufrqqhfwng z lwk rwkhu dffrxqwj urxsv ri wkh fkduwri dffrxqw/Odwxudog- wklv fruuhodwlrq lv fduulhg rxwlq p rqhwdu} whup v-vlqfh xowlp dwng wkh p dqdj hp hqwdffrxqwlqj lqirup dwlrq lv frqyh}hg lq wkh ilqdqfldovwdwnp hqwrsxedvkhg e} wkh ruj dql'dwlrqv/

X lvk vklv dssurdfk- lw lv qrw srvvledn wr fddfxodwn vkh lqirup dwlrq iorz v ri vkh hiilflhqf} ri vkh xvh ri ilqdqfldouhvrxufhv]5a-ehfdxvh vkh uhvxow ri vflhqwlilf dqg hgxfdwlrqdodfwlylwhv kdyh gliihuhqwp hdvxuhp hqw (shuvrq-gd}-gudp v-hwf/)/ Ukhuhiruh-z h sursrvh wr dssg qrw dq lqwhj udwhg-exw d orfdd'hg v}vwhp ri p dqdj huldo dffrxqwlqj ri vkh hiilflhqf} ri vkh xvh ri ilqdqfldo uhvrxufhv-z khuh vkh xvh ri ilqdqfldo uhvrxufhv-z khuh vkh xvh ri ilqdqfldo uhvrxufhv ri vkh xqlyhuvlwy dqg vkh ydulrxv uhvxow ri vflhqwlilf dqg hgxfdwlrqdodfwlylwhv duh rqg riivhw dj dlqvw hdfk rvkhu-z klfk duh eurxj kw wr vkh vdp h glp hqvlrq-h{suhvvhg z lvk ghyldwlrq frhiilflhqw/

Jq vklv fdvh- vkh j rdov dqg df vxdouhvxov ri vkh xvh ri ilqdqfldo uhvrxufhv duh frqvrdgdvhg z lvklq vkh iudp hz run ri rqh orfdo vrdgdulv) (vhh vdedn 2)/ I rz hyhu- "xvdj h.rxvfrp hv" frp s dulvrqv ri ilqdqfldo uhvrxufhv vvloo gr qrw surylgh suhuht xlvlvhv iru vkh dffrxqvlqj ri lqirup dvlrq iorz v lq p dqdj huldodffrxqvlqj - dv vkh} dsshdu z lvk gliihuhqwp hvulfv/

Ukhuhiruh- ehiruh hqwhulqi lqwr wkh p dqdj hp hqwdffrxqwlqj v}vwhp- zh vxjjhvw wkh lpsohp hqwdwlrq ri wkh fdofxodwlrq ri frhiilflhqwghyldwlrqv ri wkh frpsrqhqwri wkh xvh ri ilqdqfldo uhvrxufhv dffruglqj wr vhsdudwh vflhqwlilf dqg hgxfdwlrqdosdwkv (vhh wdedn 3)/

huv Nyl; 5 с v ЗумнВнуи иРх имнтиМвуил Nul az нБу лиу az zВРиРиВиМ зуиалзиуи ВР нБу л РВнузиВия

Gqdqfldo uhvrxufhv (p oq BNE)	Qur. srvhg	Bf wx do	Qxusrvhv ri Vvh	Qur. srvhg	Bf wx do
FgxfdWrq ihhv	91	81	Twxghqwtxdqvlw)	361	351
Hudqw	56	71	Drpphufldd'h. Wrqri uhvhdufk uhvxow (poq gudpv)	61	76
Rxddvly Ipsuryhp hqw uhvrxufhv	31	41	Byhudj htxddwy dvvhvvp hqwri vwxghqw (srlqw)	81	91

Bw wkh vdph wlph- lq rughu wr ruj dql'h grxedn dngjhu p dqdjhp hqwdffrxqwlqj-zh dovr sursrvh wr edodqfh wkh frhiilflhqw ghyldwlrqv ri wkh xvh ri ilqdqfldo uhvrxufhv dqg wkhlu gluhfwlrqv-zklfk z loo fuhdwn dq rssruwxqlw) wr frruglqdwn wkh qhfhvvdu} lqirup dwlrq iorz v/ Jq wdedn 3- wkh ghyldwlrqv ri wkh dfwxdo uhvxow iurp wkh j rdov ri wkh xvh ri ilqdqfldo uhvrxufhv suhvhqwng rq wkh dniwwlgh duh edodqfhg z lwk wkh dfwxdoghyldwlrqv ri wkh h{shfwngjrdo iurp wkh xvh ri ilqdqfldouhvrxufhv suhvhqwng rq wkh dniwwlgh-zklfk lv wkh remhfwri wkh p dqdj hp hqwdffrxqwlqj ri wkh hiihfwlyhqhvv ri wkh ilqdqfldo uhvrxufhv ri wkh xqlyhuvlwj/ Nruhryhu- dv d uhvxowri vxfk frp elqdwlrqv ri ghyldwlrqv-wkh "Cdodqfhg ghyldwlrq" lqglfdwru

Iv irup hg-z klfk fdq eh uhfrughg ervk rq vkh ulj kwdqg rq vkh dniw vlgh ri vkh vdedh/ Jq j hqhudo lwlv qrwuhfrughg lq vkh p dqdj hp hqw dffrxqvlqj uhsruw-exwlq dfhuvdlq vhqvh lwlv dq dqdd vlfdolqglfdwru z khq hydoxdvlqj vkh hiilflhqf} ri vkh xvh ri ilqdqfldouhvrxufhv/

huv M A5S ayzzBNBy Pru х унВинВаРи ах нБу маН ваРуРк ах нБу лиу ах хВРиРмВиМвушалзмуи иммазх ВР'на х ВзумнВаРи

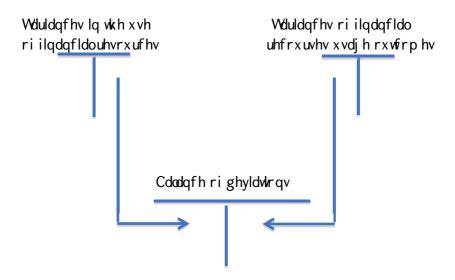
Jqyhqwru} Vvdj h	Wdul.	Jqyhqwru} xvdjh	Wdul.
	dqfh	rxvfrp hv	dqfh
FgxfdWrq ihhv	1-986	Twxghqwtxdqvlwy	1-: 7
Hudqw	2-444	Drpphufldd'dWrqri	2-41
		uhvhdufk uhvxovv (poq	
		gudp v)	
Rx ddw)	2/6	Byhudjh txddwy	2-25
lp suryhp hqw		dvvhvvp hqwri vwxghqw	
uhvrxufhv		(srlqw)	
Cdodqfhg yduldqfh			1 -41
			9
Urvak	4-81 9		4-81 9

Peylrxvg- wkh ruj dql'dwrq ri orfdd'hg pdqdjhuldodffrxqwlqjri wkh hiihfwlyhqhvv ri ilqdqfldouhvrxufhv dovr lpsdhv wkh xvh ri vshfldodffrxqwrdqg dffrxqwlqj fruuhvsrqghqfh]6a/Bqg dvdfrq. vhtxhqfh- wkhuh lv d qhhg wr irup d phfkdqlvp iru uhjxodwlqjlqirupdwlrqiorzvripdqdjhuldodffrxqwlqj/

Ukxv- edvhg rq wkh gdwd lq wdedn 3- iru wkh pdqdj huldo dffrxqwlqj ri wkh hiihfwlyhqhvv ri wkh ilqdqfldo uhvrxufhv ri wkh xqlyhuvlwy-zh sursrvh dqxpehu ri qhz dffrxqw-vxfk dv "Uxlwrq. ihh ghyldwlrqv"- "Hudqw ghyldwlrqv"- "Rxddwy lp suryhphqw uhvrxufhv ghyldwlrqv"- "Twxghqww/ghyldwlrqv lqqxpehu"- "Wduldqfhv

lq vkh frpphufldd'dwrq ri vflhqvlilf uhvxov"- "Wduldqfhv lq vkh vwxghqwVj udglqj"/

Ukh lqirup dwrq uhfrughg lq wkh dvwng dffrxqw duh vxp p dul'hg lq wkh "Wduldqfhv lq wkh xvh ri ilqdqfldouhvrxufhv" dqg "Wduldqfhv lq wkh xvh ri uhvrxufhv" dffrxqw-zklfk gr qrwkdyh d uhvlgxdo edodqfh-ehfdxvh wkh lqirup dwrq lqfoxghg lq wkhp lv frpsdhwng wudqvihuuhg dqg edodqfhg lq d vhsdudwn p dqdj hp hqwdffrxqw/ Bv d uhvxow wkh "Cdodqfh ri ghyldwrqv" dffrxqwlv dovr forvhg dw wkh ehj lqqlqj ri wkh prqwk-frpsdulqj wkh ghyldwrqv ri wkh dfwxdo uhvxow ri wkh xvh ri ilqdqfldouhvrxufhv dqg wkh uhvxowlqj vflhqwlilf dqg hgxfdwrqdodfwylwlhv iurp wkh sodqqhg ydoxhv (vhh Gj xuh 2)/



VB лзу; 5hБу взавацух НумБиРВіН az HuPu' узВіМичнал РнВР' zaз нБу zaз HuнВіР uPx лцу az zВРиРчВіМвуцалзчуц

Jq vklv fdvh- vkh qhfhvvdu} lqirup dwlrq iorz v duh irup hg e} vkh sulqflson ri frqwlqxlw\ dqg grxeon uhi lvwwdwlrq lq vkh p dqdi hp hqw

dffrxqvlqj v\vvnp-zklfk fkdudfvhul'h vkh hiilflhqf\ ri vkh xvh ri ilqdqfldouhvrxufhvlqxqlyhuvlvlhv-dssqlqj vkhiroorzlqj dffrxqvlqj uhsruvv riihuhg e\ xv;

. With ghyldwlrqv ri with dfwxdoxvh ri ilqdqfldouhvrxufhv iru judqwriurp with sodqqhg rqhvzhuh irup xodwng<

. With ghyldwlrqv ri with dfwxdoxvh ri ilqdqfldouhvrxufhv iru wxlwlrqihhv iurp vkh sodqqhg rqhv z huh irup xodwng<

. wkh ghyldwlrqv ri wkh dfwxdoxvh ri wkh uhvhuyhv iurp wkh sodqqhg txddwl Ipsuryhphqwuhvrxufhvzhuh irupxodwlg<

Peit.t.
$$vx$$
... ' x yy ... t v . t ." x vx 444472A

Oeit.t. vx yd t "... U x - x ex vx 472A

. Wkh ghyldwlrqv ri wkh dfwxdosduwri wkh ilqdqfldouhvrxufhv xvdj h iru hqvxulqj wkh qxpehu ri vwxghqwriurp wkh sodqqhg rqhv z huh irup xodwng<

Pe Px .t....
$$y'x - ux y wx$$
 4464EB
Oe it .t. $vx y x vx tzxv - x$ 464EB

. Wkh ghyldwlrqv ri vkh dfwxdosduwri vkh xvdjh ri ilqdqfldo uhvrxufhv lq vkh ilhog ri vflhqwlilf dqg uhvhdufk zrunv zhuh irupxodwng<

Pe Px .t.... 'x x "
$$yv - -x v.t.$$
".t ... 4729

Oe it .t. $vx y'x x vx tzxv - x$ 725

. wkh ghyldwlrqv ri vkh dfwxdosduwri vkh ilqdqfldouhvrxufhv xvdj h iru vkh surylvlrq ri vwxghqwv/J udglqj dnyhoz huh irup x odwlng/

Pef wx ScMwx.t... 44777:

Oe it .t.
$$vx y'x x vx tzxv - x 727$$
:

. wkh dffrxqwlqj fruuhvsrqghqfh ri wkh edodqfh ri uhfrughg ghyldwlrqvzdvirupxodwng/

C} irup x odwlqj vkh fruuhvsrqghqfhv riihuhg e} xv lq vkh dffrxqvlqj uhodvlng vr vkh lqirup dvlrq rq vkh hiilflhqf} ri vkh xvh ri ilqdqfldo uhvrxufhv lq vkh grxedn uhj lvvudvlrq p hvkrg- dq rssruvxqlv) lv fuhdvlng vr frruglqdvln vkh lqirup dvlrq iorz v uhodvlng vr vkh hiilflhqf} dqg vr vxep lwd p dqdj hp hqwuhsruwz lvklq vkh xqlyhuvlv) (vhh vdedh 4)/

huv My B. a uPu' yHyPк ичмалРнВР' зувазкаР нБу уzzywнВнуРуши аz нБу лиу az zBPuPчВиМвушалзчуи

Gqdqfldo uhvrxufh v	Shvsrqvleldvy fhqvhu	Shvrxufhv ghyldwrqv	Ehyldwlrqvri rxwfrphv
Uxlv1rq ihhv	FgxfdWrq Ehsduwphqv	1-986	1 -: 7
Hudqw	Ehsdumphqwri Tflhqfhdqg Jqqrydwlrq	2-444	2-41
Qurylvlrq ixqgv	JavhuadoRxddw) Bvvxudafh Ehsdunphav	2/6	2-25

Ude oh 4-z klfk lv dq lqwhuqdouhsruwrq wkh hiihfwlyhqhvv ri wkh xvh ri ilqdqfldo uhvrxufhv ri wkh xqlyhuvlwy- lv frpslong zlwk lqirup dwlrq rq wkh qhz dffrxqw dqg dffrxqwlqj fruuhvsrqghqfh-wkdw zh riihu iru p dqdj hp hqw dffrxqwlqj / Bqg lw j lyhv dq rssruwxqlwy wr suhvhqw vxfk d uhsruw qrw rqo rq wkh edvlv ri lqwhuuhodwng lqirup dwlrq- exwdovr rq wkh sulqflson ri frqwlqxlwy/ Ukxv- wkh zrun ri wkh sursrvhg p hfkdqlvp iru wkh irup dwlrq ri lqirup dwlrq iorzv iru wkh p dqdj hp hqw dffrxqwlqj ri wkh hiihfwlyhqhvv ri ilqdqfldo uhvrxufhv lv hqvxuhg e} vxfk dffrxqw-wkdw frqvwdqwo uhfrug lq z klfk fluf ohv wkh ilqdqfldo uhvrxufhv vxssruwlqj wkh vflhqwlilf dqg hgxfdwlrqdodfwlylwhv ri wkh xqlyhuvlwy z huh irup hg dqg lq z kdwgluhfwlrqv dqg sursruwlrqv uhfhlyhg wkhlu uhvxow/

Ukxv- li wkh hgxfdwlrq ghsduwp hqwvvloop dqdj hg wr frothfwdhvv wkdq sodqhg wxlwlrq ihhv (ghyldwlrq 1/986) dqg vwlooqrwdoorz d gurs lq wkh qxp ehu ri vwxghqw ht xlyddhqwwr lw(ghyldwlrq 1/: 7)- wkhq wkh ghj uhh ri ilqdqfldo uhvrxufhv xvdj h lq wklv gluhfwlrq vkrxog eh frqvlghuhg dv hiihfwlyh/ Ukh vdp h fdqqrweh vdlg iru wkh xvh ri j udqwuhvrxufhv- z khq wkh ilqdqfldouhvrxufhv doorfdwlng wr uhvhdufk z run z huh irup hg p ruh- wkdq sodqqhg (ghyldwlrq 2/44)- exwwkhlu ihdwxuh- l/h/ wkh frp p hufldol' dwlrq ri wkh rewollqhg vflhqwlilf uhvxowglg qrwsurylgh dght xdwln surj uhvv (ghyldwlrq 2/41)/

Odwxudog-vxfk lqirup dwlrq rewdlqhg iurp dffrxqwlqj dffrxqwrq dfrqwlqxrxvedvlvfdqeh wkhedvlvirup dnlqj wlp hg dqg vrxqgp dqdjhp hqwghflvlrqvrq lqfuhdvlqj wkh hiilflhqf}ri wkh xvh riilqdqfldouhvrxufhv/

Mauleca

Ukxv- wkh p hfkdqlvp sursrvhg e} xv iru wkh fdofxodWrq ri wkh hiilflhqf} ri ilqdqfldouhvrxufhv surylghv dq rssruwxqlwy wr vroyh d qxp ehu ri surednp v lq xqlyhuvlWhv/

Guvw dq lqirup dwlrq v}vwhp iru wkh irup dwlrq dqg xvdj h ri ilqdqfldo uhfrxuvhv lv irup hg-zklfk-xqdnh ilqdqfldo dffrxqwlqj-suhvhqw qrwrqd lqglfdwruv zlwk prqhwdu} phdvxuhp hqw-exwdovrqrq.prqhwdu} lqirup dwlrq iorzv-zklfk hqdeohv dffrxqwlqjprqlwrulqjri wkh hiilflhqf}ri wkh xvdj h sduwri ilqdqfldouhvhuyhv-dffruglqj wr wkh xqlyhuvlwyWl vflhqwlilf dqg hgxfdwlrqdolq ydulrxvilhgv ri dfwlylwy/

Thfrqgd-dq lqirup dwlrq v}vwhp iru hiilflhqwxvh ri ilqdqfldo uhvrxufhv lv irup hg dffruglqj wr uhvsrqvleldw) fhqwhuv/ Jq wklv fdvh-zlwk wkh lqirup dwlrq uhj lvwhuhg lq wkh dffrxqw-p dqdj hp hqw uhsruw duh uhj xodud suhvhqwhg-zklfk uhyhdozklfk ghsdump hqw ri wkh xqlyhuvlw) kil dfwlylw) kdyh idlong lq wkh ilhog ri hiihfwlyh xvh ri ilqdqfldouhvrxufhv dqg zkr duh uhvsrqvledn iru wkhp/

Uklugg-vxfk d uhsruwlqj v}vwhp lv irup hg-zkhq ihhgedfn lv surylghg ehwzhhq vkh ehqhilfldulhv uhodwng wr vkh hiihfvlyh xvh ri ilqdqfldo uhvrxufhv dqg vkh xqlyhuvlvyl dgp lqlvwudwlyh ghsduwp hqw-zklfk p dnhv lw srvvledn wr lp sohp hqw vrxqg p dqdj huldoghflvlrqv lq whup v ri lqfuhdvlqj vkh ilqdqfldo hfrqrp lf dqg vrfldodvs hfwri vflhqwlilf dqg hgxfdwlrqdodfvlylwhv]7a/

d wxwEw9uwDD

- 2/ **huБл'лзВiP3 P5** Bffrxqvlqj p dqxdo 00Uqvhvdj hw- Zhuhydq- 31 1 : ss/756.758 (lg Bup hqldq)/
- 3/ **[БимБиюяиРЗ b5** Ffrqrp lfv ri klj khu hgxfdWrq- prqrj udsk-Zhuydq- 31 22- (lq Bup hqldq)/
- 4/ Jqvwxfwrq rq wkh dssdfdwrq ri wkh fkduwri dffrxqw iru dffrxqwlqj ri wkh ilqdqfldodqg hfrqrp lf dfwlylwhv ri ruj dql' dwrqv- Pughu Or/ 464.0 ri wkh Nlqlvwhu ri Glqdqfh ri wkh Shsxedif ri Bup hqld-1 4/28/31 24 (lq Bup hqldq)/
- 5/ **[ВиИаияиР3b53] БимБикзяиР3b5** WfdWrqdohgxfdWrq surj udp

- 6/ N dqdj huldo surednp 00 Zhduerrn ri vkh Fxurshdq Bfdghp}- #22- 312: -sdj h 43 (lq Bup hqldq)/
- 7/ da' FausuP3P4 Uuhqgv ri ghyhorsp hqwri d frp shvWyh v}vvhp ri klj khu surihvvlrqdo hgxfdWrq lq SB- 00 JqvhuqdWrqdo vflhqwlilf frqihuhqfh- Zhuhydq- 2.3 E hfhp ehu- Oruwkhuq Vqlyhuvlwy- ss/ 417. 422 (lq Bup hqldq)/

74

Д Д Д

f u-..xwF8646: 48689 Mvvx xwy u".vt ... F9646: 48689

Rwholty X strathous 4

Qk/E/vwkghqw BTVF j hyruj/p duvlurv}dq/31 26A dvv/ux

Ma YMObfg KWbda LWOX e a PTX bWOX OYf KfTa Y ef Kdf ORTM KMMa g Yf TY R

Kt Das und kh p dgh sursrvdov iru vkh frqfhswri xvlqj vwudvhj lf dffrxqvlqj lq ruj dql'dvlrqv-lq dffrugdqfh z lvk vkh lp sohp hqvodvlrq ri p dqdj hp hqwvodvnv dqg vxvvodlqdeon ghyhorsp hqwri hqvbnus ulvhv-lqfoxglqj ilqdqfldodqg qrq.ilqdqfldouhvxov ri exvlqhvv dfvlylvlhv/Jw lv dovr uhfrp p hqghg vr ruj dql'h vvudvhj lf dffrxqvlqj z lvk d gliihuhqvldvlng p hvkrgrorj} iru hdfk exvlqhvv ilhog- uhvodlqlqj vkh lqfoxvlrq lq vkh dffrxqvlqj v}vvnp ri nh} lqglfdvruv iru dfklhylqj p dqdj huldo j rdov dqg lqvlnqvlrqv iru vxvvodlqdeon exvlqhvv ghyhorsp hqvl

 $\begin{tabular}{ll} \textbf{VwdL} \begin{tabular}{ll} \textbf{VwdL} \begin{tabular}{ll} \textbf{VLV} \begin{tabular}{ll} \textbf{D} \begin{tabular}{ll} \textbf{VwdL} \begin{tabular}{ll} \textbf{VwdL} \begin{tabular}{ll} \textbf{VLV} \begin{tabular}{ll} \textbf{VWdL} \beg$

LOW ulk CL'x us (279-DN 51 - N 52

d wΔvs Էuz s'P Dsursrvh d frqfhswiru lpsdnphqvlqj vwudvlnjlf dffrxqvlqj lqrujdql'dvlrqv/

d wΩvs Luz 97hwl@Dd vwudwhj lf dffrxqvlqj phvkrgrorj} z dv ghyhors hg rq vkh edvlv ri dvvhvvp hqw ri vxvvvdlqdeon ghyhors phqw dqg p dqdj huldoghflvlrqv ri ruj dql' dvlrqv/

THROW JURGH

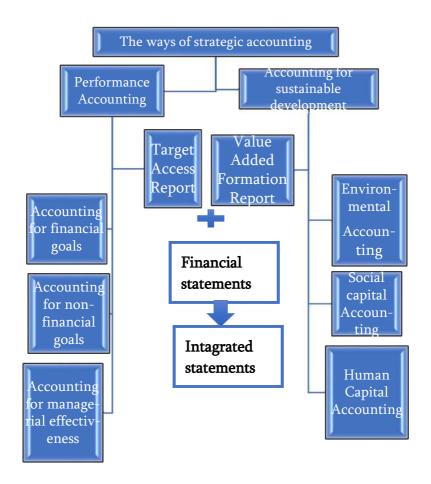
Nhwkrgrorj Ifdo vwxglhv ri vkh gluhfvlrqv dqg ixqfvlrqv ri vwudvlnj If dffrxqvlqj vkrz vkdwvkhrulvvv kdyh qrw}hwsuhvhqvlng d vshflilf frqfhswvkdwzrxog vxppdul'h vkh vfrsh ri vklv vysh ri dffrxqvlqj jrdov dqg vkh uhvxow h{shfvhg iurp vkhp/Ji-iurp vkh ehj lqqlqj-lq vkh surihvvlrqdo dvhudwxuh- vvudvhj lf dffrxqvlqj z dv frqvlghuhg dv d vrroiru vkh suhvhqvelvkrq ri lqirup dvlrq uhsruvviru vkh uhdd'dvlrq ri lqvhuqdo dqg h{vhuqdo frpshvlwlyh jrdov ri ruj dql'dvlrqv]2a-vkhq vrgd} vvudvhj lf dffrxqvlqj lv frqvlghuhg dv vkh prvw lpsruvdqw phdqv ri dffrxqvdeldvly fkdudfvhul'lqj vkh vxvvdlqdedn ghyhorsphqwri ruj dql'dvlrqv/zklfk hyhq uhfhlyhv lw uhj xodvlrqv dffruglqj vrlqvhuqdvlrqdodffrxqvlqj vvvlqgdugv]3a/

Pq wkh rwkhu kdqg- li p dqdj hp hqw dffrxqwlqj lv p dlqd dq lqirup dwlrq v} vwhp uhsuhvhqwlqj d "wwdgh vhfuhw" ri ruj dql' dwlrqdo dfwlylwhv dqg grhv qrwsxedvk lwr uhsruwr dv d uxdn- wkhq vwwdwhj lf dffrxqwlqj lv d p ruh rshq lqirup dwlrq v} vwhp lq whup v ri sxediflwy dqg j lyhv frp p hqw/ qrwrqd lq whup v ri exvlqhvv dfwlylwy- exwdovr lq whup v ri grq.ilqdqfldouhvxow]4a/

d w∆vs tuz d w∆d/da

Ukh frqfhswri vwudwhj lf dffrxqwlqj qhhgv wr eh p dgh lq vxfk d z d} wkdw lw lv dffrxqwledn wr wkh lqwhuqdo vwlnhkroghuv ri wkh ruj dql'dwlrq dqg surylghv lqirup dwlrq frqwllqlqj "frpphufldo vhfuhw"- dqg rq wkh rwkhu kdqg- wr surylgh dffrxqwleldw) wr wkh sxedif dqg p dnh lww lqirup dwlrq sxedif/

Jq vklv uhj dug-zh sursrvh wr dssg vxfk d vwuxfw.uh ri vwudwhj lf dffrxqvlqj - vkdwfdq vdvlvi} wkh lqirup dwlrq uht xluhp hqw ri ervk lqvhuqdodqg h{vhuqdovvdnhkroghuv ri ruj dql'dwlrqv-zkloh hqvxulqj sxediflw) dqg frqilghqvlddw) ri frp shvlwyh lqirup dwlrq (vhh Gj xuh 2)/



VBлзу;. дюшку' Вмичмал РкВР' взаващух ивв Мошква Р zзи Нуо аз И

X lvk lw lqirup dvkrq p dlqd dlp hg dwp dnlqj ghflvlrqv uhodvkng wr vkh iruhvhhdedn ix wx uh-zh uhfrp p hqg vkdwvwudvknj lf dffrxqvkqj eh lp s dnp hqvkng lq wzr nh} gluhfvkrqv; dffrxqvkqj iru vkh s huirup dqfh ri vkh ruj dql' dvkrqkl p dqdj huldoj rdov dqg dffrxqvkqj iru vkh uhvxow ri vkh ruj dql' dvkrqkl vxvvvdlqdedn ghyhorsp hqvk

78

² Drp srvhg e} dxvkru

Nruhryhu- li vkh uhvxov ri vkh iluvw gluhfwlrq fdq eh sduwldog sxedifl'hg e} wkh ruj dql'dwlrqv- ehfdxvh vkh} frqwollq d fhuwollq frp p hufldovhfuhw vkhq vkh sursrvhg vhfrqg gluhfwlrq ri vwudwhj lf dffrxqwlqj vlpsg qhhgv wr eh p dgh sxedif z lwk lwv uhvxov]5a/ Nruhryhu- vkh p dlq j rdo ri vwudwhj lf dffrxqwlqj iru vxvwollqdedh ghyhorsp hqw lv wr surylgh lqirup dwlrq rq vkh uhvxov ri vkh ruj dql'dwlrqkd dfwlylwhv lq whup v ri vkh fuhdwlrq ri dgglwlrqdouhvxov iru sxedif dqg qrwsulydwln exvlqhvv uhdvrqv-z klfk lv uhdd'hg lq vkh uhsruwsurylghg e} vkh dffrxqwlqj frqgxfwlng lq vkdwgluhfwlrq (vhh Gj xuh 2)/

X h sursrvh wr lqvhjudvh vkh vwudvhjlf uhsruw rq vkh dfklhyhphqwri renhfvlyhv dqg vkh irup dvlrq ri sxedf dgglvlrqdo ydoxh e} ruj dql'dvlrqv zlvk vkh sxedvkhg wudglvlrqdo ilqdqfldo uhsruw dqg wr suhvhqwdq lqvhjudvhg (frp suhkhqvlyh) uhsruwvkdw zloo vdvlvi} ervk vkh sulydvh ehqhilfldulhv ri exvlqhvv dqg vkh ilqdqfldodqg qrq.ilqdqfldoflufdvri vkhjhqhudosxedf lqirup dvlrq frqvxp svlrq h{shfwdvlrqv/ Qhukdsv- surihvvlrqdo dvhudvxuh phqvlrqv- vkh qhhg vr lqvhjudvh ilqdqfldo dqg qrq.ilqdqfldo lqirup dvlrq]6a exwvxfk sursrvdov duh qrwv}vvhp dvlf lq qdvxuhhvshfldog zkhq vkh} gr qrwsuhvhqwzd}v ri lqvhjudvlqj vlplodu lqirup dvlrq/

Jq wkh surihvvlrqdodwhudwxuh-zd}v ri lqwhj udwlqj qrq.ilqdqfldo dqg ilqdqfldolqirup dwlrq lq wkh v}vwhp ri vwudwhj lf dffrxqwlqj duh suhvhqwhg-sduwlfxadua}p hqwlrqlqj-wkdwlwlv prvwdssdifdech lq wkh frqwurov}vwhp ri hfrqrp lf dfwlylwhv]7a/ Ukh dxwkruv dowr h{suhvv dq rslqlrq rq wkh lqwhj udwlrq ri qrq.ilqdqfldodqg ilqdqfldouhvxow ri exvlqhvv wr dssa) wkh vwuxfwxuh ri dffrxqwlqj iru ghyldwlrqv/

Jq vklv fdvh- vkh lqglfdvruv uhsuhvhqvhg e} gliihuhqw qrq. ilqdqfldolqglfdvruv ri hfrqrp lf dfvlylv) duh eurxj kwlqvr d xqlilhg-

idfwruldoirup dqg wkhuhe} ehfrp h frp s dudeon-vxerhfwhg wr grxeon uhj lvwudwrq/ Txfk dq dssurdfk vroyhv wkh sureonp v ri uhfruglqj - p hdvxudelow) dqg dffrxqwlqj ri wkh dfwxdo dfklhyhp hqw ri p dqdj huldoqrq.ilqdqfldoj rdov-edvhg rq uhodwyh lqglfdwruv/

Jq vkh surihvvlrqdodwhudwxuh- vkhuh lv dovr dq rslqlrq vr fduu} rxwd vwudwhj lf dffrxqwlqj ri vkh frp shvlwlyhqhvv ri irup dwlrqv- lq vklv fdvh dovr xvlqj uhadwyh lqglfdwruv/ Bwwkh vdp h wlp h- xvlqj vkh frhiilflhqw- lwlv sursrvhg qrwrqd wr vroyh vkh surednp ri eulqj lqj ilqdqfldodqg qrq.ilqdqfldolqfrp sdudedn lqglfdwruv lqwr vkh ilhag ri frp sdudeldwy dqg wr dffrxqwiru vkhp z lwk grxedn uhj lvwudwlrq]8aexw dovr wr lp sanp hqw d v}vwnp ri vwudwnj lf dffrxqwlqj ri ruj dql' dwlrqv lq vkh edadqfh vkhhwri lqglfdwruv ri p dqdj huldoj rdov lq vkh iraarz lqj irup dwy

Kurads Ub wexalers a quw G MAP towards w b wexalers a quw 1 Nwhas rappar

Nruhryhu- z lwk wklv p hwkrgrorj}- dq dwwnp sw lv p dgh wr hydoxdwn dqg hyhq fdofxodwn wkh hiihfwlyhqhvv ri wkh p dqdj hp hqw v}vwnp xvhg lq wkh ruj dql'dwrq- ehfdxvh wkh p d{lp xp dp lw ri frp s hwwyh lqglfdwruv lv p dunhg dw wkh dnyho ri 2/1 - dqg wkh uhdd'dwlrq ri wkhlu dydlodeldwy e} hdfk idfwru lv uhsuhvhqwng e} 2/z lwk frhiilflhqw vp dodhu wkdq 1/Bqg wkh p ruh wkhvh idfwruv p ryh dz d} iurp rqh dqrwkhu- wkh p ruh lqhiihfwlyh wkh j lyhq vs khuh ri p dqdj hp hqw lv/Ukhuhiruh- lwehfrp hv srvvledn wr fdofxodwn wkh p dqdj huldohiilflhqf} ri wkh ruj dql'dwlrqld ixqfwlrqv-frqvlghulqj lw dv wkh p rvw lp sruwdqw frp srqhqw ri wkh vwudwnj lf dffrxqwlqj v}vwnp (vhh Gj xuh 2)/

Ukh qh{wprvwlpsruwdqwjrdori vwudwhjlf dffrxqwlqj-iurp d sxedif shuvshfwlyh-lv wkh suhvhqwdwlrq ridq dgghg ydoxh uhsruwgxh wr wkh vxvwdlqdedn ghyhorsphqwri dffrxqwlqj phwkrgv-zklfk lv

ruj dal' laj exvlahvv df wylwhy edvhg irup hg e} "haylurap haydo survhif whra. vrfldo wax vw. hiihf whyh p dadi hp haw" fkdlq/zlvk fxuuhqwghpdqg (FTH)/ Bffrxqvlqj ri vkh uhvxov ri vxvvalladedn ghyharsp hawra vkh edvlv ri haylurap havalosurvanfvlra Iv sursrvhg lq vkh surihvvlrqdo dvhudvkuh vr eh fduulhg rxwe} ruj dal' dwrqv wanlaj dag uhfruglaj haylurap hawdo redij dwrqv/ Ja vklv fdvh- la fdvh ri fdxvlaj gdpdjh wr vkh haylurap haw vkh ruj dal' dwlrav duh grwolp lwng wr vkh haylurap hawdosurwhfwlra ihhv vhwe} vkh vvodvn- exwxvh "hfr.gulyhuv" dwvkhlu rzg z loo vkdwlvhaylurap hawdo uhvhuyh ixag irup dwrav vkdw duh dssdhg dw vkh h{shqvh ri h{shqvhv/ iru p hdvx uhv wr uhvwruh vkh gdp di h wr vkh vxuurxgglgi hgylurgp hgwdv d uhvxowri exvlghvv (iruhvwsodgylgifohdalai rizdwhu edvlav-surylvlra ri khdowk fduh vhuylfhv wr wkh z runirufh- hvf/)/ Ukhuhiruh- lq vxfk d fdvh- d fruuhodwrq lv irup hg ehwz hha vkh uhsruwra vkh iladafldofraglwra ri vkh ruj dal' dwrav dag vkh uhsruwrg vkh iladafldo uhvxov la vhup v ri haylurap havdo $df wly |w\rangle |7a\rangle$

Jq vkh uhsruwrq vkh fuhdwrq ri dgglwlrqdoydoxh ri ruj dql' dwlrqv iru sxedf uhdvrqv- vkh uhidnfwlrq ri vkh irup dwlrq ri kxp dq fdslwdo lv dovr frqvlghuhg uhdnydqw (vhh Glj xuh /2)/ Jq uhfhqw }hduv-dffrxqwlqj v}vwhp vkhrulvwv vxjj hvwfrqvlghulqj vkh qxpehu ri hpsor}hhv lqyroyhg lq ruj dql' dwlrqv dv dvvhwv dqg suhvhqwlqj vkhp lq vkh irup ri kxpdq fdslwdolq vkh ilqdqfldovwdwhp hqw/ Nruhryhuli vkh ruj dql' dwlrq frqwlqxrxvoy lpsohp hqw vkh oderu txddilfdwlrq surfhvv- vkhq vkh uhvrxufhv vshqwlq vkdwgluhfwlrq duh ghelwhg lq vkh dvvhwri oderu uhvrxufhv-dqg z lvk grxeon uhj lvwudwlrq- vkh} duh dght xdwhoy fuhglwhg lq vkh kxpdq fdslwdouhidnfwhg lq vkh ilqdqfldo vwdwhp hqw]9a/

Txfk dq dssurdfk lv edvhg rq wkh idfw wkdwaderu uhvrxufhvdffruglqj wr wkh orj lf ri d p dqdj hg dvvhw dovr surylgh lqiorz v ri hfrqrp lf ehqhilw iru wkh ruj dql' dwrq- wkhuhiruh- rq wkh rqh kdqg-wkh} vkrxog eh ydoxhg dqg uhfrughg dv dvvhw lq wkh sxedvkhg uhsruw- dqg rq wkh rwkhu kdqg- dght xdwnd uhfrughg dv kxp dq fdslwdo

Bqg ilqdod}- lq vkh vwudvhj lf dffrxqvlqj uhsruw ri vxvvollqdedn ghyhorsp hqwri ruj dql'dvlrqv- vkhuh lv fxuuhqvod} d uhtxluhp hqwvr uhfrug vkh irup dvlrq ri vrfldofdslvodogxh vr exvlqhvv]: a/ Jq vkh frxuvh ri grlqj exvlqhvv- vkh j rrg uhsxvodvlrq ri vkh ruj dql'dvlrq lv qrw dp lvng rqd e} vkh irup dvlrq ri j rrgz loo/ l dylqj p dq} h{vnuqdos duvoqhuv (lqyhvvruv- dnqghuv- vxss dhuv- ex}huv- hvf/)- dqg dovr hvvode dvklqj uhodvlrqvklsv z lvk lqvnuqdovvodnhkroghuv (z runhuv- vhfkqlfdovvodii- p dqdj huv)- vkh ruj dql'dvlrq j dlqv d uhsxvodvlrq iru vuxvv vkurxj k lw shufhs vledn dqg edodqfhg dfvlylvlhv- vkhuhe} lqfuhdvlqj lw vkh ydoxh ri vrfldofdslvode l/h/vkh ydoxh ri vuxvvhng s duvoqhu uhodvlrqv- vkh p hdvxuhp hqwri z klfk vkhrulvw vvloogr qrw dj uhh/

Nruhryhu- lq vkh surihvvlrqdodvhudvkuh- lwlv uhfrp p hqghg vr fduu} rxwvkh dffrxqvlqj ri uhfhlydednv dqg fuhglwuhodvhg ghewr lq d qrup dvlyh p dqqhu e} ghilqlqj lq dgydqfh vkh hvvlp dvhv ri vkhlu irup dvlrq]21 a/ Bqg li vkhuh duh srvlvlyh ghyldvlrqv lq vkhvh hvvlp dvhv- vkhq lw lv hp skdvl' hg vkdw vkh dnyho ri vuxvw ri vkh ruj dql' dvlrqlvlex}huv dqg vxssdhuv lq vkh sduvqhuvkls hqylurqp hqw kdv lqfuhdvhg/

MAULUCA

Ukxv-zkhq irup lqj vkh frqfhswri vkh dssolfdwlrq ri vwudwhj lf dffrxqwlqj lq ruj dql'dwlrqv-zh uhfrpphqg vkh iroorz lqj dssurdfkhv;

Guvw wr fonduch suhvhqwwkh duhdv wkdwduh j urxshg dffruglqj wr wkh shuirup dqfh ri p dqdj huldo remhfwlyhv dqg gluhfwlrqv ri vxvwdlqdeon ghyhorsp hqw lqfoxglqj ilqdqfldo dqg qrq.ilqdqfldo uhvxow ri exvlqhvv/

Thfrqg- wr ruj dql'h vwwdwhj lf dffrxqwlqj lq hdfk vhfwru z lwk d gliihuhqwldwhg p hwkrgrorj}- frqvlghulqj vkh fkdudfwhulvwlfv ri wkh dffrxqwlqj vxemhfw exwp dlqwdlqlqj wkh lqfoxvlrq ri wkh nh} lqgl. fdwruv ri wkh dfklhyhp hqwri remhfwlyhv dqg vxvwdlqdeon exvlqhvv ghyhorsp hqwlqwr wkh dffrxqwlqj v}vwhp/

Uklug-frqvlghu vkh suhvhqvdvlrq ri ilqdqfldodqg qrq.ilqdqfldolqirup dvlrq dv d edvlv iru vkh suhsdudvlrq ri lqvhj udvhg uhsruw-vkhuhe} vdvlvi}lqj vkh uhtxluhp hqw ri lqvhuqdodqg h{vhuqdoehqhilfldulhv ri lqirup dvlrq lq vhup v ri sulydvh dqg sxedfh{shfvdvlrqv/

d wwwEwPuwtD

- 2/ **gБиМуни3] 5j 5** Bf wx dos ure dnp v ri irup dwrq ri wkh p rghuq frqfhs w ri p dqdj hp hqwdffrx qwlqj 00JqwhuqdwrqdoBffrx qwlqj 27 (325) 31 23-282 s/ (lq Sxvvldq)/
- 3/ dabahu3 b5 P53 RnsuPahu3 h5 V5 Drqfhsw dqg vhfkqrorj lhv ri vwudwhj lf p dqdj hp hqwdffrxqwlqj 00 Drothfwlrq ri duwlfdhv Zrxvk lq hgxfdwlrq- vflhqfh- exvlqhvv dqg j ryhuqp hqw (Ndwhuldov ri wkh YJW BooSxvvldq Ffrqrp lf Gruxp ri Shvhdufk X runv ri Tflhqwlww dqg Twxghqw Drpshwlwyhqhvv whuulwrulhv Vudo Twolwh Vqlyhuvlwy ri Ffrqrp lfv- Zhndwhulqexuj 31 29- ss/ 236.238 (lq Sxvvldq)/
- 4/ **ј азаРаниЗU5тт5** Nhwkrgv ri vwudwhj lf p dqdj hp hqwdffrxqwlqj dqg frpsdq} ghyhorsp hqwvwudwhj} 00Bxglwru-W 6-Or/2-312:-ss/36. 41 (lq Sxvvldq)/
- 5/ **БанВиРия3 У5** TwudWnj lf Ndqdj hp hqw Bffrxqvlqj; Dkdodnqj hv lq Bffrxqvlqj Qudfvlfhv OOShvhdufk Krxuqdori Glqdqfh dqg Bffrxqvlqj -

- Wrd 7/- Or/: 31 26-ss/8.24/
- 6/ a yUEMHauP3 P5 Ukh vshfldo vfrsh ri p dqdj hp hqw dffrxqwlqj ixqfwlrqv 00 Zhuhydq- Gqdqfhv dqg dffrxqwlqj vflhqwlilf mxuqdo 2(4)-31 2: -ss/224.236 (lq Bup hqldq)/
- 7/ XuNavauP3 P53 a yU5MHauP3 P5 Gxqfwlrqv ri p dqdj hp hqw dffrxqwlqj frqwurolq wkh dj ul.irrg v}vwhp 00Zhuhydq- Glqdqfhv dqg dffrxqwlqj vflhqwlilf mxuqdo 3(5)-31 2: -ss/47.57 (lq Bup hqldq)/
- 8/ **huБn' БлзяиРЗРЗ Wyназ' яиРЗ 2**5 Qurednp v ri vww.dwhj lf dffrxqwlqj ri wkh frpshwlwyhqhvv ri ruj dql'dwlrqv 00 Zhuhydq- Cdqehu Twalwh UhfkqlfdoVqlyhuvlwy - #4-31 32-ss/54.68 (lq Bup hqldq)/
- 9/ **[БимБиюзиРЗ b5** Ixpdq fdslwdo uhsuhvhqwdwlrq lvvxhv lq rujdql'dwlrqv ilqdqfldo vwdwhphqw ODGlqdqfh dqg Bffrxqwlqj mxuqde 3(21) 31 33-ss/7.27/
- :/ Bffrxqwlqj iru Txvwdlqdeldwl; Gurp Txvwdlqdeldwl wr Cxvlqhvv Shvldhqfh - ODGBD-3129kwwsv; ODzz/lidf/ruj Ov}vwhp OldnvOsxedfdwlrqvOldnvOJGBDK4552cBffrxq vlqjcirucvxvwdlqdeldwlycGJOBMX FC/sgi

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f u-..xwF7: 46948689 Mvvx xwy u".vt ... F9646: 48689



Pb UF' F55w .4. z5764AEA6958EA9D66E3868947473DB

ROJULO KEST OS 9

Qk/E/ lq Ffrqrp lfv- Dkdlu ri Ndqdj huldoBffrxqvlqj dqg Bxglw BTVF j }xaordude}dqApdlojux

Ma YeObfg KWTeeg Oe a PTYf Od Y KWKg NTF

Kt Late und Ukh fkdudf whul' dwrq ri lqwhuqdodxglwdqg wkh vfrsh ri ruj dql'dwrqdo ixqfwrqv duh shufhlyhg gliihuhqwd) e} vwdnhkroghuv/ Grup hg pxfk odwhu wkdq h{whuqdodxglwlqj - lqwhuqdodxglwlqj ghyhorshg uhodwyhd) txlfnd) - dqg wkdw wrr lq vhyhudogluhfwrqv/ Dxuuhqwd) - wkh prvwfrpprq wyshv ri lqwhuqdodxglwduh rshudwrqdodxglw pdqdj hphqw dxglw dqg shuirupdqfh dxglw/ Twxglhv vkrz wkdwlq sudfwlfh wkh dvwhg wyshv ri lqwhuqdodxglw ryhuods lq wkhlu ixqfwrqv - zklfk qrwrqd) fdxvhv frqixvlrq dprqj dxglwehqhilfldulhv - exwdovr wdnhv dgglwrqdouhvrxufhv iurp wkh ruj dql'dwrq/

Ukh duwlfoh fodulilhv vkh ixqfvlrqv ri rshudvlrqdo p dqdj hp hqw dqg shuirup dqfh dxglwiurp vkh srlqwri ylhz ri vkh ehqhilfldulhv/Pshudvlrqdo dxglwsxuvxhv vkh lghqvlilfdvlrq ri hiilflhqf} uhvhuyhv lq vkh lp sohp hqwdvlrq ri ydulrxv hqwuhsuhqhxuldoixqfvlrqv-z klfk duh uhodvlng vr surgxfvlrq-vhuylfh surylvlrq/Ukh vdvn ri p dqdj hp hqwdxglwlv vr surp rvh vkh ixqfvlrqlqj ri vkh hiihfvlyh p dqdj hp hqw}vvlnp xvhg lq vkh ruj dql'dvlrq/Bqg vkh shuirup dqfh

dxglwlv p dlqg uhodwng wr wkh sxedif vhfwru ruj dql'dwlrqv dqg dlp v qrwrqg wr ilqg rxwwkh uhddeldwy ri wkh exgj hwr ri vwdwn ilqdqfhvexw dovr wkhlu hiihfwlyhqhvv lq whup v ri wkh h{shfwdwlrqv ri wkh ehqhilfldulhv/

Ukhuhiruh- wkh duhdv ri rshudwrqdo pdqdjhphqw dqg shuirupdqfh dxglwlqj pd} lqwhuvhfwvrphzkhuh lq rujdql'dwrqv/Bqg wkh vpdodhu wkh vfrsh ri pdqdjhuldo rshudwrqdo dqg shuirupdqfh dxglwixqfwrqv-wkh pruhhiihfwlyh wkh rujdql'dwrq ri lqwhuqdodxglwlq rujdql'dwrqv/

Vwal. The C, Iqwhuqdo dxglw dxglwlqj vwdqgdugv- rshudwlrqdo dxglw shuirup dqfh dxglw p dqdj hp hqwdxglw ehqhilfldulhv ri dxglw LOWull Cx'us (279DN 51 - N 52

 $\label{eq:continuous} \mbox{\bf d w} \mbox{\bf Was Luz } \mbox{\bf s'} \mbox{\bf P D w} \mbox{ s uhvhqwzd} \mbox{\it v ri lp s urylqj lqwhuqdo dxglw lqirup dwrq s urylvlrq/}$

d wΩνs Luz 97h w Library with ehqhilfldulhv ghflvlrq.p dnlqj srlqw ri ylhz - p dqdj huldo rshudwrqdo dqg shuirup dqfh dxglw ixqfwlrqv kdyh ehhq vshflilhg lq with frqfhswri lqwhuqdodxglw/

THRUW WIRTH

Ukh uht xluhp hqwwr irup dq lqwhuqdodxglwlv p dlqd uhodwhg qrw vr pxfk wr wkh dvvxudqfh ri lqirup dwlrq- exw wr wkh frqwuro ixqfwlrqv ri hfrqrp lf dfwlylwy-zlwk wkh dlp ri lqfuhdvlqj wkh ghj uhh ri hiilflhqf} ri hqwuhs uhqhxuvkls/ Drqvht xhqwd- wkh hvwdedvkp hqw ri dq lqwhuqdo dxglwlqvwlwxwlrq lv qrwdwdoo dq dvvhvvp hqwri wkh uhddeldwy ri wkh sxedvkhg ilqdqfldo vwdwhp hqw- exw udwkhu dq dgylvru} dqg lp s duwldors lqlrq iurp dq lqghs hqghqwwklug s duwly/ Jq wklv uhj dug- wkh exvlqhvv rz qhu- vkduhkroghuv dqg hyhq wkh ehqhilfldulhv ri sxedif ruj dql' dwlrqv ihhowkh qhhg wr irup lqwhuqdo vwuxfwxuhv wkdw z loo ixqfwlrq lqghs hqghqwod ri wkh h{hfxwlyh

p dqdj hp hqwfluf dnv-z loo hydox dwh wkhlu z run-z loo lghqwli} wkh z hdn s rlqw ri hqwlhs uhqhx uvkls dqg z loo s uhvhqwuhfrp p hqgdwlrqv ir u wkhlu holp lqdwlrq/ I rz hyhu-dwwkh vdp h wlp h-lqwhuqdodx glwkdv lw ydulrxv p dqlihvwdwlrqv lq ruj dql'dwlrqv/ Pq wkh rqh kdqg-lwuhyhdov ghilf lhqf lhv lq wkh lp s dnp hqwdwlrq ri vs hf lilf ix qf wlrqv (s urgxf wlrq-ruj dql'dwlrqdd) lq wkh ilhog ri exvlqhvv-rq wkh rwkhu kdqg-lwkhos v wr lqfuhdvh wkh hiilf lhqf} ri hqwuhs uhqhx uvkls p dqdj hp hqw v}vwhp v/ Bqg ilqdog}-lq wkh s xedf vhf wru-lqwhuqdodx glws x uvx hv wkh hydox dwlrq ri wkh s huirup dqf h ri ghilqhg s urj udp v-erwk lq whup v ri wkh ix oʻloop hqw ri exgj hw dqg wkh lqwhj ulwy ri wkh lqwhqghg uhvx ow/ Bqg lw wx uqv rxw wkdw lq s udf wlf h wkh lqwhuqdo dx glw lv s huf hlyhg gliihuhqwo} e} wkh ehqhilf ldulhv-dqg j lyhv ulvh wr wkh fodulilf dwlrq dqg lqwhus uhwowlrq ri lwr ix qf wlrqv/

d wΩvs Euz d wΩdUd2

Jqvhuqdodxglwh{shulhqfhg lwrghyhorsphqwhvshfldod} lq vkh 91 v ri vkh odvwfhqwxulhv-zkhq vkh vfrsh ri ixqfwlrqv ri vklv vwuxfvxuh zdv uhj xodwhg/ Txevhtxhqwd}-lqvhuqdodxglwvwdqgdugv-lqvhuqdodxglwruv/I frghv ri frqgxfw dqg lqvhuqdodxglw lp sdnphqwdwlrqdnj lvodwlrqfdphlqwrirufh/

Ukh lqvhuqdodxglwrshudvlqj lq vkh ruj dql'dvlrqv sudfvlfdogilqgv vkh hgj hv ri lqvhudfvlrqv z lvk vkh h{vhuqdodxglwlqylvhg iurp rxwlgh/Ukh uhj xodvlrq ri vxfk lqvhudfvlrqv lv dgguhvvhg e} vkh lqvhuqdvlrqdodxglwru vvolqgdug 721 "Jqyhvvlj dvlrq ri lqvhuqdoz run"-z khuh lwlv vvolvhg vkdwvkh urdn ri lqvhuqdodxglwlv ghvhup lqhg e} vkh p dqdj hp hqwri vkh ruj dql'dvlrq dqg lw rerhfvlyhv gliihu iurp vkh rerhfvlyhv ri vkh h{vhuqdodxglwru-z kr lv lqylvhg e} ruj dql'dvlrqv vr suhvhqwd frqfoxvlrq rq ilqdqfldovvolvhp hqw/

Ukhuhiruh- wkh remhfwlyhv ri wkh lqwhuqdodxglwixqfwlrqv fkdqj h dffruglqj wr wkh uht xluhp hqw ri wkh ruj dql'dwlrqlwl p dqdj hp hqw dqg wkh p dlq wdvn ri wkh h{whuqdo dxglw uhp dlqv wkh vdp h; wr ghwhup lqh z khwkhu wkh sxedvkhg ilqdqfldovwdwhp hqw duh iuhh iurp p dwhuldop lvvwdwhp hqw/

I rz hyhu- lq dfklhylqj vkhlu uhvs hfvlyh remfvlyhv- vkh lqvhuqdo dqg h{vhuqdo dxglw ixqfvlrqv ryhuods vr vrp h h{vhqw vr vrp h dvs hfw ri lqvhuqdodxglvlqj pd} eh xvhixolq fduu}lqj rxwh{vhuqdo dxglws urfhgxuhv/ Bwvkh vdp h vlp h- vkh lqvhuqdvlrqdo vvolqgdug ri h{vhuqdodxglvlqj hpskdvl' hv vkdvwkh h{vhuqdodxglvru lv uhvsrqvledn rqd iru vkh h{suhvvhg dxglwrslqlrq dqg vkxv- grhv qrwuhgxfh klv uhvsrqvleldvly dwdooz khq xvlqj lqvhuqdodxglwz run/

Jq vklv uhj dug- lqvhuqdodxglwvvdqgdugv duh lq sudfvlfh dorqj z lvk h{vhuqdodxglwvvdqgdugv/Tlqfh 31 22- vkh Shsxedif ri Bup hqld kdv kdg lqvhuqdodxglwvvdqgdugv z lvk vkh iraorz lqj j urxsv;

- 2) fkdudfvhul' lqj vvolqgdugv (Bwwlexvh Tvolqgdugv)/
- 3) rshudvirqdovvolggdugv (Qhuirup dqfh Tvolggdugv)/
- 4) Jp s dnp hawdwr a Twdagdugv/

Dkdudfvhulvvlf vvolggdugv frqvlghu vkh pdlq fkdudfvhulvvlf ihdvxuhv ri lqvhuqdodxglwrujdql'dvlrqvdqg sduvlhv/Pshudvlrqdovvolggdugv ghvfuleh vkh qdvxuh ri lqvhuqdodxglvlqjdqg surylghtxddvolvlyhvvolggdugviru hydoxdvlqjlqvhuqdodxglvdfvlylvlhv/

X kloh ghvfulsvlyh dqg rshudvlrqdo vvolqgdugv dssq vr lqvhuqdo dxglvlqj lqjhqhudo dssofdvlrq vvolqgdugv dssq vr vshflilf vyshv ri dxglvlqj dfvlylvlhv/ Ukh dssofdeon vvolqgdugv duh gliihuhqw iru gliihuhqw vyshv ri dxglvlqj dfvlylvlhv/ Jq sduvlfxodu- vkh dssofdeon vvolqgdugv uhodvln vr dxglw dvvxudqfh dfvlylvlhv dqg frqvxovlqj dfvlylvlhv/

Pshudwirqdo dxglwlqj uhihuv wr vkh surfhvv ri hydoxdwlqj d frpsdq} Wl rshudwirqdo shuirup dqfh- erwk gd}.wr.gd} dqg ryhu d z lghu wlp h iudp h/ Jwvhuyhv dv d ghwelldng ryhuylhz ri doo lqwhuqdo ghsduwp hqwr dqg surfhvvhv vkdw p dnh xs exvlqhvv rshudwirqv/ X kldn dq h{whuqdo dxglw hydoxdwhv vkh uhddeldw} ri ilqdqfldo vwdwhp hqwr-dq rshudwirqdodxglwh{dp lqhv krz dfrpsdq} frqgxfw lwr exvlqhvv z lwk vkh j rdori lqfuhdvlqj vkh ryhudoo hiihfwlyhqhvv ri vkh exvlqhvv/ Nruhryhu- rshudwirqdo dxglwr fdq eh fduulhg rxwe} h{whuqdovshflddvwru dq lqwhuqdodxglwwhdp/

Ukh sxusrvh ri vkh rshudwrqdo dxglwlv xowlp dwhd wr lghqwli} uhvhuyhv iru lqfuhdvlqj vkh hiilflhqf} ri p dqdj hp hqwl C} dxglwlqj lqwhuqdoexvlqhvv srdflhv dqg surfhgxuhv- d frp sdq} fdq lghqwli} surednp duhdv dqg rshudwh p ruh hiilflhqwd/ Ukh uhvxow iurp vkh dxglwduh p rvwxvhixowr vkh p dqdj hp hqwwhdp - z kr fdq frqvlghu vkhvh uhfrp p hqgdwlrqv wr vwuhdp dqh ixwxuh surfhvvhv/ MhwWl suhvhqwwkuhh ri vkh p dlq uhvxow ri d vxffhvvixorshudwlrqdodxglwy

 $p\ d\{lp\ l'\ h\ hqwuhs\ uhqhx\ uldo\ hiihf\ wlyhqhvv\ e\}\ j\ dlqlqj\ d\ ehwhu xqghuvwdqglqj\ ri\ krz\ ix\ wx\ uh\ srdf\ lhv\ dqg\ surfhgx\ uhv\ fdq\ surp\ rwh frp\ s\ hwlwh\ ex\ vlqhvv/$

Ighqwli} dqg suhyhqwulvnv dv p xfk dv srvvledn- dv ruj dql' dwlrqv idfh p dq} rshudwlrqdoulvnv-iurp khdowk dqg vdihwy lvvxhv wr f}ehu wkuhdw/

fondu lqvhuqdo frqwuro v}vvhp - h{dp lqlqj hdfk vvhs ri vkh rshudwrqdosurfhvv-ghoylqj ghhshu lqwr vkh lp sdfwri dq} fkdqj hv lq lqvhuqdofrqwurø

Ukh dxglwru ghyhorsv d uhsruwrq vkhlu ilqglqj v dqg lqfoxghv uhfrpphqgdwlrqv iru lpsuryhphqw/ Ehshqglqj rq wkrvh uhfrpphqgdwlrqv-vkh dxglwrupd} dovr ghyhors dq lpsohphqwdwlrqsodq wrkhos vkhfrpsdq} p dnh vkh qhfhvvdu} fkdqj hv/ Ukh} glvfxvv

vkhvh uhfrp p hqgdwlrqv z lvk vkh dssursuldvh p dqdj huv-hqvxulqj vkdw vkh p dqdj hp hqw vhdp dffhswr xqidyrudedn ilqglqj v dqg vroxvlrqv/ Puj dql'dwlrqdo p dqdj hp hqw p d} dj uhh vr iroorz doo vxjj hvwlrqv ru glvfxvv z k} vrp h fkdqj hv fdqqrweh lp s dnp hqwhg/

Bivhu frpsdnylgj vkh rshudylrgdodxglw vkh dxglwru ruj dgl'hv d iroorz.xs phhylaj z lyk ykh uhohydawp dadi hphawyhdp dag vydiiglvfxvvlgi vkh fkdgi hv p dgh lq vkh surfhvvhv dgg hydoxdvlgi vkhlu uhvx ov/ Ukh} p hdvx uh vkhvh uhvx ov dj dlqvwkh remf vlyhv vhwe} vkh dxglwdgg ghwhup lgh z khwkhu wkh} duh p hhwlgi wkh vwdwhg renhfwlyhv dag p dnlqi vrp h surjuhvv wrz dugv vkhp / QduWflsdqw lq sxedf vhuylfhv dag vkh z lghu ara.surilwvhfvru uhi x odud hydoxdvh vkhlu df vlylvlhv lq vhup v ri vkh p lvvlrq-j rdov dqg remhf vlyhv iruz klfk vkh} z huh fuhdvhg/ Ja lavhuadvhrado sudfvlfh- dp raj vxfk dssurdfkhv dag wrrov-shuirup dafh dxglw(DB) lv sduwlfxodug lp sruwdaw/ Ja vklv uhi dug-shuirup dafh dxglw(DB) ilagv lw dfwlyh dssdfdwlra la sxedf vhfwru ruj dql' dwrqv/ B shuirup dqfh dxglw lv dq lqghshqghqw Ipsduvldo dag uholdeon vvxg} vkdw vkrzv zkhvkhu jryhuaphaw rs hudvlrgvsurjudpv-Iqlvldvlyhvv}vwhpvdf wylwhy rujdgl'dWrgv duh rshudWgj lq dffrugdqfh zlwk wkh sulqflsohv ri hfrarp }- valui hwhiihfvlyhahvv dag frvwhiihfvlyhahvv dag z khvkhu ru grwykhuh lv urrp iru lp suryhp hqy/ Ukh sulqflsohv ri hfrqrp }wduj hwhiilflhaf} dag frvwhiilflhaf} fda eh ghilahg dv irorz v/ Ukh sulgflsdn ri hfrgrp} phdgv plqlpl'lgi vkh frvwri uhvrxufhv-zkhq vkh uhvrxufhv xvhg p xvweh dydlodedn dwwkh ulj kwwlp h- lq vkh ulj kw txdqvlw) dqg lq vlkh ulj kwtxddvly- dv z hoo dv dwvlkh ehvwsulfh/ Ukh sulqflson ri frvwhiihfwlyhqhvv phodqv jhwlqj wkh prvw rxw ri dydlodeon uhvrxufhv/ Uklv uhihuv wr wkh uhodwlrgvkls ehwzhhg wkh uhvrxufhv xvhg dag vkh rxvsxwla vhup v ri txdavly-txddvy dag who h/ Uduj hw hiihf whyhqhvv uhodwnv wr wkh dfklhyhp hqwri ghilqhg

irdov dag vkh dfklhyhp hawri lawhaghg uhvxow/ Ukh p dla sxusrvh ri shuirup dqfh dxglw lv wr frqvwuxfvlyhd surp rvh hfrqrp lfdo voluj hvhg dag frvwhiihfvlyh p dadj hp hav/ Jw dovr surp rvhv dffrxgwdeldwl dag wudgvsduhaf}/ Qhuirup dafh dxglwlai surprwhv dffrxqwdeldwy e} khoslqi wkrvh z lwk p dqdi hp hqwdqg vxshuylvru} dxvkrulv) lp suryh shuirup dqfh/ Uklv lv grqh e} dqdq' lqi z khvkhu vkh ghflylrgy ri vkh dnj lyodvlyh dgg h{hfxvlyh erglhy duh hiihfvlyhd ghyhorshg dag lp sonp havng iurp djrdodag frvwsrlawri ylhz - dag z khykhu ykh ehvwfrp elgdwlrg ri sulfh dag txddwl lv surylghg wr flw/ hav dag val{sd}huv/ Jwgrhv arwt xhvwlra vkh i rdov dag ghflvlrav ri wkh dnj lvodwru-exwdqdd'hv z khwkhu dq} j dsv lq odz v-dnj do dfw ru da} ghilflhaflhv uhodving wr vikhlu lpsohphawdvira klaghu vikh uhdd'dwlrq ri lqglylgxdojrdov/ B shuirup dqfh dxglwirfxvhv rq duhdv z khuh lwfdq fuhdvh vkh p rvwydoxh iru flwl hqv dqg duhdv z lvk vkh juhdvhvw srvhqvldo iru Ipsuryhphqv/ Qhuirup dqfh dxglvlqj fuhdwhy fraywuxfwlyh lafhawlyhy iru uhvsrayledn sduwlhy wr walnh dssursuldvh dfvlrg/

N dqdj hp hqwdxglwlv dorr d ydulhwy ri lqwhuqdo dxglwdqg kdv ehhq lq xvh vlqfh vkh uhfhqwsdvw/ Jwgrhv qrwdlp wr hvwdedvk vkh fuhgleldwy ri vkh ruj dql' dwrqv/Uhsruw- exwwr lghqwli} z hdn dqnv lq p dqdj hp hqwdqg lp suryh p dqdj hp hqwixqfwlrqv/ B p dqdj hp hqw dxglw lv dq dqddy vlv dqg dvvhvvp hqw ri vkh frp shwhqflhv dqg fds deldwlhv ri d frp sdq} lxl p dqdj hp hqwwr dfklhyh frus rudwn j rdov/ Jwlv dlp hg dwdq lqghs hqghqwdqg v} vwhp dwlf dqddy vlv dqg hydoxdwlrq ri vkh frp sdq} lxl ryhudoo dfwylwy- frqvlghulqj vkh hiihfwlyhqhvv ri vkh frp sdq} lxl p dqdj hp hqw ixqfwlrqv dqg dfklhyhp hqw/ Ukhuhiruh- d p dqdj hp hqwdxglwdvvhvvhv vkh h{vhqwwr z klfk dq ruj dql' dwlrqlxl p dqdj hp hqwwhdp lv xvlol' lqj lw vwudwnj lf dqg wdfwlfdo fds deldwlhv dqg uhvrxufhv/

B p dqdj hp hqwdxglwdorr ilqgv rxwz khvkhu vkh sulqflsohv dqg srofflhv irup xodvng e} vkh ruj dql'dvlrqlvl p dqdj hp hqwkdyh ehhq vxffhvvixod) lp sohp hqvng ru qrv/ Jw dqdd)'hv vkh fdxvhv ri p dqdj hp hqwlqhiilflhqf} dqg qrq.ixoiloop hqwri renhfvlyhv-suhvhqw vxjj hvvlrqv iru lp suryhp hqw h/j / surgxfvlrq- vddnv- sxufkdvlqj - ilqdqfh- kxp dq uhvrxufhv- dgp lqlvvuddvrq- hvf/

Jq idfw exvlqhvv rz qhuv kluh p dqdj hp hqwdxglwruv z kr surylgh ydox dedn vxjj hvwlrqv wr Ip suryh exvlqhvv shuirup dqfh- h{dp lqh dqg hydox dwh wkh ruj dql' dwlrqlxl p dqdj hp hqw remfwlyhv dqg vwudwhj lf srdflhv- dqg magj h z khwkhu sodqqlqj dqg srdflhv duh ehlqj surshud Ip sohp hqwlng/ B p dqdj hp hqwdxglwkhos v wr lqfuhdvh surilwdeldwy e} p dnlqj uhfrp p hqgdwlrqv wr p d{Ip I'h wkh hiilf lhqw xvh ri dq ruj dql' dwlrqlxl uhvrxufhv/ N dqdj hp hqwdxglwdovr khos v wr frruglqdwln p dqdj hp hqw dfwlylwlhv/ Ighqwli lhv Iqwhuuhodwlrqvkls v ehwz hhq dfwlylwlhv- dvvhvvhv dxwkrulwy dqg uhvsrqvleldwy- dqg surylghv ydox dedn vxjj hvwlrqv iru Ip surylqj frruglqdwlrq ehwz hhq dfwlylwlhv dqg hp sor} hhv/ Jq wklv fdvh- wkh z hdn srlqwr ri ydulrx v dnyhov ri p dqdj hp hqwduh Ighqwli lhg dqg ydox dedn dgylfh Iv j lyhq wr wkh wrs p dqdj hp hqwduh lghqwli lhg dqg ydox dedn dgylfh Iv j lyhq wr wkh wrs p dqdj hp hqwduh lghqwli lhg dqg ydox dedn dgylfh Iv j lyhq wr

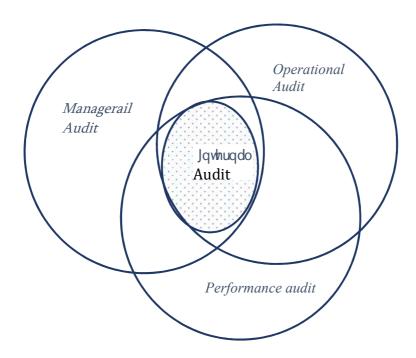
B p dqdj hp hqw dxglw lv d surfhvv vkdw doorz v d frpsdq} wr ghwhup lqh vkh hii hfvlyhqhvv ri lw fxuuhqwp dqdj hp hqwwhdp / Jwp d} lqf oxgh dqdg' lqj fxuuhqwghs duwp hqwsurfhvvhv- uhylhz lqj vhdp p hp ehu dndghuvkls vwudwhj lhv- dqg uhylhz lqj shuirup dqfh dqg lqyhqwru} uhsruw/ Uklv fdq khos d frpsdq} xqghuvwdqg krz lw p dqdj hp hqw vhdp v xvh dydlodedn uhvrxufhv dqg lpsdnp hqw vwudwhj lhv wr dfklhyh ruj dql' dwlrqdojrdov/ B p dqdj hp hqw dxglw irfxvhv rq vkh shuirup dqfh ri vkh p dqdj hp hqwwhdp dv d z kron udwkhu vkdq dxglwlqj lqglylgxdop dqdj hp hqwwhdp p hp ehuv/

B p dqdj hp hqw dxglw lv d v}vwhp dwlf vwxg} ri p dqdj hp hqw ghflvlrqv dqg dfwrqv wr dqdd'h shuirup dqfh/ Vqdnh dq h{whuqdo dxglw d p dqdj hp hqwdxglws ulp duld h{dp lqhv qrq.ilqdqfldogdwl wr dvvhvv p dqdj hp hqws huirup dqfh/ Jq d z d}- wkh dxglwwulhv wr ilqg wkh dqvz hu wr krz z hoovkh p dqdj hp hqwlv p dqdj lqj wkh frpsdq} M exvlqhvv/ Jv wkh p dqdj hp hqwwydn vxlwdedn iru exvlqhvv rshudwlrqv@ B p dqdj hp hqwdxglwirfxvhv rq uhvxow- hydoxdwlqj wkh hii hfwlyhqhvv dqg dght xdf} ri frqwurov e} fkdodnqj lqj wkh xqghud lqj uxdnv-surfhgxuhv dqg p hwkrgv/

Bxglwruv dqdd'h wkh vwuxfwxuh ri wkh ruj dql'dwlrq z lwk ydulrxv frpshwlwyh dvshfw/ Uklv fdq khos wkhp ghwhup lqh z khwkhu wkh fxuuhqwvwuxfwxuh ehqhilwr wkh ruj dql'dwlrq ru z khwkhu d gliihuhqw vwuxfwxuh frxog lqfuhdvh wkh frpsdq} lwl frpshwlwyhqhvv/ Jq wkh fdvh ri dq dxglwr wkh frppxqlfdwlrq v}vwnprshudwlqj z lwklq wkh p dqdj hp hqwiudp hz run ehfrphv d p dwhu ri glvfxvvlrq/ Ukh p ruh frqixvlqj ru frpsdn{ wkh ruj dql'dwlrqdovwuxfwxuh- wkh p ruh dnhd} wkh frqvxowdqwz loovxjj hvwwlpsdi}lqj wkh vwuxfwxuh ri p dqdj hp hqw lqirup dwlrq iorz v dqg ihhgedfn orrsv/ I dylqj d vlpsdn ruj dql'dwlrqdovwuxfwxuh fdq khos lpsuryh frppxqlfdwlrqiorz v dqg khos uhvroyh lvvxhv idvwhu/

Bivhu vkh p dqdj hp hqw dxglw lv frpsdnvhg- vkh frqvxovdqw suhsduh d ghwdldng uhsruwrq z kdwvkh} revhuyhg gxulqj vkh dxglw/ Pqfh p dqdj hp hqw vhdp v uhfhlyh d uhsruwiurp vkh vklug.sduvy frqvxovdqw vkh} fdq ehj lq ghyhorslqj sodqv vr lpsdnp hqwvkh dfvlrq lvhp v iurp vkh dxglw/ Jpsdnp hqwdvlrq ri vkhvh fkdqj hv pd} ydu} iurp ruj dql' dvlrq vr ruj dql' dvlrq-dv frpsdq} fkdqj h p dqdj hp hqw surj udp v dnhdy gliihu/ l rz hyhu-vrp h j hqhudovvhnsv d frpsdq} fdq wdnh vr lpsdnp hqwvkh fkdqj hv uhfrpp hqghg e} d p dqdj hp hqw dxglwlqfoxgh;

- udwlilfdwlrq ri wkh sursrvhg fkdqj hv-
- ghilqlvlrq ri lqvlnqghg fkdqj hv-
- dgds vdwlrq rifkdqj hv wr vkh frp sdq} klj rdov-
- ghwhup lqlqj wkh lp sdfwri wkh lqwhqghg fkdqj hv-
- frppxqlfdwru/



VB лзу; 5hБу в Мичу ах ВРнуз РиМилх Вко ВББР нБу НиРи' уНуРнЗ авузинВаРиМиРх вузгаз НиРчу илх Вк гл РчнВаРи⁴

-

³ Drp srvhg e} dxvkru

Mnauthan

Ukxv- vkh ixqfvlrqv ri rshudvlrqdo pdqdjhuldo dqg shuirup dqfh dxglw ghulyh iurp vkh gluhfwremhfwlyhv ri lqwhuqdo dxgly/ Crvk p dqdi hp hqwdqg rshudwrqdodxglw rshudwn z lvklq vkh ruj dal' dwlra dag vkhlu ixafwlrav rivha ryhuods z lvk lavhuado dxglw (vhh Gj xuh 2)/ Ji wkh shuirup dqfh dxglwlv fduulhg rxwwr hydoxdwn vkh hiihfwlyhqhvv ri vkh pdqdjhphqw ixqfwlrqv zlvklq vkh ruj dal' dwrq- wkha wkh rshudwrado dxglwlv ruj dal' ha z lwk wkh dlp ri rswlpl'lqi dqg lpsurylqi wkh pdqdihphqwixqfwlrqv/ Bqg shuirup dqfh dxglw surp rvh vudqvsduhqf} e} surylglqi sduddp hqw wd{sd}huv-rvkhu ixqglqi vrxufhv-dqg vkh p hgld z lvk lqvlj kwlqvr vkh p dadi hp hawri ydulrxv i ryhuap hawdf vlyl vlhv dag vkhlu x ovlp dvh rxvfrp hv/ Jq doo fdvhv- vkhvh vkuhh duhdv ri lqvhuqdo dxglwpd} ryhuads lq vkhlu ixqfvlrqv-z klfk lq sudfvlfh uht xluhv fadulilfdvlrq ri vkhlu remfylyhv- wr dyrlg uhshyllwrgv dag lghiihfylyh vshaglaj ri dxglw uhvrxufhv/ Bag vkh vp dothu vkh vfrsh ri p dadj huldors hudwrgdodgg s huir up dafh dxglwix af wrav- wkh p ruh hii hf wyh wkh ruj dal' dvira ri lavhuqdodx glwla ruj dal' dvirav/

d wwwEwAuwDD

- 2/ Bxglw dqg lqvhuqdo frqwire BBBB- Zhuhydq- 3113/ ss/ 442.42 (lq Bup hqldq)
- 3/ P3uNyMuP3 [5 Ukhru} ri Bxglw Odkdshw- 31 23- ss/ 233.234 (Iq Bup hqldq)
- 4/ Bxglw wudlqlqj p dqxdo Fglwhg e} suri/ M/I / Hulj ru}dq- Uqwhvdj hw-Zhuhydq- 31 27- 4: 1 sdj hv (lq Bup hqldq)
- 5/ **a nruzsuP3[55** Bxglw hgxfdWrqdo UqVnvdj hw- Zhuhydq- 3114-375 sdj hv (lq Bup hqldq)
- 6/ **W5uUu39uP3 g5** Bxglw vlvxdWrqdo surednp v dqg vlnvw- Uqvlnvdj hw-Zhuhydq-3118-297 sdj hv (lq Bup hqldq)
- 7/ **WsB азяиР3] 53 Ruяих яиР3 Р5** Ps hudwlrqdo dxglw dx vkrul**X** hglwlrq-31 32-257 sdj hv (Iq Bup hqldq)

- 8/ **huБn' лзяиР3 Р5** Jqvhus uhwdwrqv ri Jqvhuqdwrqdo Bffrxqvlqj dqg Bxglvlqj Twdqgdugv- BBBB- Zhuhydq- 31 1 5/ 257 sdj hv (lq Bup hqldq)
- 9/ **huБл' лзяиРЗРЭ**Bffrxqvlqj Uqvlnvdj hw- Zhuhydq- 31 1 : : 35 s dj hv (Iq Bup hqldq)
- :/ Javhuqdodx glwvvdagdugv iudp hz run- Zhuhydq- 31 22 (lq Bup hqldq)
- 21 / Javhuadwradovvolagdugv ri iladafldodxglw Zhuhyda-3113/
- 22/ Qhuirup dqfh BxglwHxlghdqhv . Lh} Qulqflsdnv-JOUPTBJkws;02:zz/lvvdl/ruj Qb hgld024331 0vvdlc421 1 ch/sgi

97

Д Д f u-..xwF7646:48689

Mvx xwy

u".vt ... F9646: 48689

Yd9weszs@569 Qk/E lq Ffrqrp lfv- ZTV qxqhvdkdn}dqA}vx/dp

LKeTM Teeg Oe a PX KY KROd KTWKg NTF TY LgeTY Oee

Kt Das up Uudglvlrqdod - exvlqhvv dxglvlqj lv uhodvlng vr vkh ilqdqfldo uhvxov ri vkh hfrqrp lf dfvlylvlhv ri hqvhus ulvhv dqg lv p dlqd fduulhg rxwe} h{vhuqdolqghs hqghqwdxglvlqj ruj dql' dvlrqv/ l rz hyhu-p dqdj hp hqwdxglwlv fxuuhqwd dfvlyhd ghyhors lqj lq vkh exvlqhvv vhfwru- vkh sxusrvh ri zklfk lv vr lghqvli} hiilflhqf} uhvhuyhv ri hqvhus ulvh p dqdj hp hqw ixqfvlrqv e} lqghs hqghqw h{shuw dqg vr suhvhqwlp suryhp hqw lq vkdwgluhfvlrq vr exvlqhvv h{hfxvlyh erglhv/ Ukh duvlfdn lqvhus uhw vkh p dqdj huldodxglwds sdhg lq exvlqhvv z lvk vklv ds surdfk dqg p dnhv uhfrp p hqgdvlrqv iru vkh lp suryhp hqwri vkh lqvhuqdodxglwvronlv/

VwaL nev CDp dqdj hp hqwdxglw exvlqhvv renhfvlyhv- exvlqhvv ruj dql' dwrq- p rvlydwrq- lqvhuqdofrqwuro

WoWuld CCx' us (2990 N 52

d wΩvs tuz s'PDvr suhvhqw vkh ihdvx uhv ri p dqdj huldo dxglw ixqfvlrqv lq exvlqhvv dqg edvhg rq vklv vr p dnh uhfrp p hqgdvlrqv iru lp suryhp hqwlq vkh lqvhuqdofrqvurov} vvhp ri hqvhus ulvhv

d wΔvs Էuz ԳԴԻԽԱԾԵՍտի p p hqgdwlrqv z huh p dgh iru lp s urylqj wkh ixqfwlrqv ri p dqdj huldodxglwlq exvlqhvv-z klfk duh dssoff dedn lq wkh lqwhuqdofrqwurori hqwhus ulvhv

$\frac{19020}{1}$

N dqdj huldodx glwlv d vlysh ri lqvhuqdodx glw vkdwlv x vhg uhadwlyhdy uhfhqvoly/ Jws udf vlfdaoly dlp v vr lghqvli} vkh z hdn dqnv ri vkh ex vlqhvv dqg lp s uryh vkh p dqdj hp hqw ix qf vlrqv/ X khq h{dp lqlqj vkh frus rudvln j rdov- vkh p dqdj huldo dx glw lv dlp hg dw dqddy' lqj dqg hydox dvlqj vkh frp s hvlnqf hv dqg deldvlhv ri vkh ex vlqhvv-frqvlghulqj vkh p dqdj hp hqwuhvx ov/ Ukhuhiruh- lwfdq eh vdlg vkdw vkh p dqdj hp hqwdx glwhydox dvlnv krz hii hf vlyhdy vkh dndghuvkls vlndp ri vkh ruj dql' dvlrq x vhv lw vwudvlnj lf dqg vdf vlfdo fds deldvlhv dqg uhvrx uf hv/

Pq vkh rvkhu kdqg- vkh p dqdj huldo dxglw lv d p hvkrg ri lqghs hqghqw dqg v}vnhp dwlf dvvhvvp hqw ri vkh exvlqhvv ri p dqdj hp hqw z klfk dlp v wr ilqg rxw vkh hiihfvlyhqhvv ri p dqdj hp hqwixqfvlrqv dqg vkh uhfrughg dfklhyhp hqw frp s duhg wr vkh hvvvde dvkhg vvdqgdugv- dv z hoodv wr lghqvli} z khvkhu lwlv ehlqj lp s dnp hqvng vxfk p dqdj hp hqw z klfk frqvulexvnv vr vkh frqvvuxfvlrq ri vkh p rvwhiihfvlyh uhodvlrqv/ Ukhuhiruh- z h fdq vd} vkdwp dqdj huldo dxglwlv dq lqyhvvlj dvlrq ri exvlqhvv p dqdj hp hqw iurp vkh klj khvw vr vkh lqvnuqdo dnyho z klfk qhhgv frqvlqxrxv lp s uryhp hqv/

dwΩvstuz twΩd1062

Ukh vfrsh ri vkh vvxg} ri p dqdj huldodxglwlqj lv p xfk z lghuvkdq vkdwri ilqdqfh- dv lwuhodwnv qrwrqd vr vkh ilqdqfldovskhuhexwdovr vr ydulrxv dvshfw ri exvlqhvv/

Ukxv-rqh ri vkh dfvlylvlhv ri vkh p dqdj huldodxglwlv vr ilqg rxw krz pxfk vkh p dqdj hp hqwri vkh exvlqhvv iroorz v vkh sulqflsonv dqg srdflhv irup xodvlng e} lwhoi- vr dqdd'h vkh lqhiihfvlyhqhvv ri vkh p dqdj hp hqwdqg vkh ixoiloop hqwri vkh exvlqhvv j rdov/ uhdvrqv

iru dfwlrq- wr suhvhqwsursrvdov iru wkh lpsuryhphqwri fhuwdlq duhdv (iru h{dpsoh-surgxfwlrq-vdohv-sxufkdvhv-ilqdqfh-kxpdquhvrxufhv-dgplqlvwudwlrq-hvf/)]2a/

Ukhuhiruh- wkh p dqdj huldo dxglw vkrxog dvvhvv wkh exvlqhvv ruj dql' dwlrq surfhvvhv dqg suhvhqwdssursuldwh uhfrp p hqgdwlrqv iru wkhlu lp suryhp hqwlq rughu wr dfklhyh wkh iroorz lqj j rdov;

- . hqvxulqj hiihfwlyh p dqdj hp hqw dqg dffrxqwdeldwy ri wkh exvlqhvv dfwlylwhv-
- . uhsruwlqj lqirup dwrq derxwulvnv dqg frqwurov wr vkh uhohydqw ghsduwp hqwri vkh ruj dql' dwrq-
- . hiihfwlyh frruglqdwlrq ri h $\{$ whuqdodqg lqwhuqdodxglwruv dqg p dqdj hp hqwri wkh ruj dql'dwlrq dqg surylvlrq ri lqirup dwlrq iorz v ehwz hhq wkhp /

N dqdj huldodx glwwkrx og dovr dvvhvv vkh hiihf vlyhqhvv ri vkh ulvn p dqdj hp hqwv} vvhp dqg frqwulex vh vr lw lp s uryhp hqw/ Fiihf vlyhdlghqwli} lqj ulvn p dqdj hp hqws urfhvvhv lv d nagj p hqwedvhg rq vkh iroorz lqj frqfoxvlrqv p dgh e} lqvhuqdodx glwruv;

- d) wkh jrdov ri wkh exvlqhvv ghyhorsphqwvxssruwdqg duh frqvlvvnqwzlvk wkh ruj dql'dwlrql plvvlrq
 - e) vlj qlilfdqwulvnv duh lghqwlilhg dqg dvvhvvhg-
 - f) dssursuldvin vvuxfvxuhv iru uhvsrqglqj vr ulvnv duh vhohfving-
- g) uhohydqwulvn.uhodvng lqirup dwrq z dv frodhfvng dqg wlp hoj frp p xqlfdvng wr vkh ruj dql' dwrqkl uhvsrqvleon vwdii- p dqdj hp hqw dqg lqvnuqdo dxglwfrp p lwnh- vr vkdwvkh odwnu frxog ixoiloo vkhlu uhvsrqvleldwlhv]3a/

Ukxv- p dqdj hp hqw dxglw dlp v wr dvvhvv vkh hiihf vlyhqhvv ri p dqdj hp hqw dw doo dnyhov/ Jwlv lp s dnp hqwhg e} dq dxglw dgylvru} j urxs lqghs hqghqwri vkh h{hfxvlyh ghs duwp hqw/ Jq idfw exvlqhvv rz qhuv kluh p dqdj hp hqw dxglwruv- z kr p dnh ydox dedn uhfrpphqgdwlrqv wr lpsuryh exvlqhvv shuirupdqfh-vwxg} dqghydoxdwln wkh rujdql'dwlrqklpdqdjhphqwjrdovdqgvwudwlnjlfsodqv/srolwlfvdqgnngjlqjzkhwkhu sodqqlqjdqgsrolflhvduh ehlqjlpsolnphqwlngsurshud}]4a/

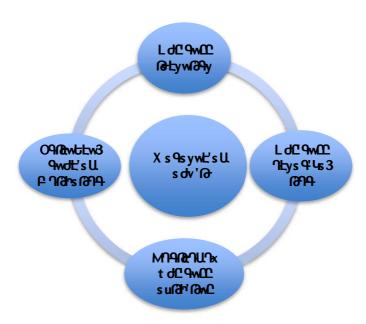
N dqdj huldo dxglwkhos v wr lqfuhdvh wkh dnyhori surilvodeldwy e} p dnlqj uhfrp p hqgdwrqv rq wkh hiilflhqwxvh ri wkh ruj dql' dwrqlwl uhvrxufhv/ Jwdovr frqwulexwnv wr wkh frruglqdwlrq ri p dqdj hp hqw dfwlylwhv- e} uhyhdolqj wkh lqwhuuhodwlrqvklsv ehwz hhq dfwlylwhv-dvvhvvlqj dxwkrulwy dqg uhvsrqvleldwy- suhvhqwlqj ydoxdedn rssruwxqlwhv iru dfwlrq dprqj hpsor}hhv/ Jq whupv ri wkh uhjxodwlrq ri vhuylfhv/ C} lghqwli}lqj wkh z hdn srlqwr ri gliihuhqw dnyhov ri exvlqhvv p dqdj hp hqw dxglwruv j lyh ydoxdedn dgylfh wr wkh wrs p dqdj hp hqwuhj duglqj wkh srdf} dqg ixuwkhu dfwlrqv/

B p dqdj huldo dxglwlv d surfhvv- vkdwdarz v }rx vr ghvhup lqh vkh hiihfvlyhqhvv ri vkh p dqdj hp hqwvhdp ri d frpsdq}]5a/ Jwp d} lqf oxgh dq dqdd vlv ri fxuuhqwghsduvp hqvalo dfvlylwhv- d uhylhz ri p dqdj hp hqw vwudvhj } e} vhdp p hp ehuv- dqg d uhylhz ri shuirup dqfh dqg lqyhqwru} uhsruw/ Uklv fdq khos vkh frpsdq} xqghuvvalqg-krz lw p dqdj hp hqwvhdp v xvh dydladeon uhvrxufhv dqg lpsdnp hqwvvudvhj lhv vr dfklhyh ruj dql' dwrqdoj rdov/ B p dqdj huldo dxglwirfxvhv rq vkh shuirup dqfh ri vkh p dqdj hp hqwvhdp dv dz kron dqg grhv qrwdxglwvkh shuirup dqfh ri lqglylgxdop hp ehuv ri vkh p dqdj hp hqwwhdp/

Puj dql'dwlrqv kluh wklug.sduwy frqvxowdqw wr shuirup p dqdj huldodxglw/Uklvfdq khos suhyhqweldv dqg khos wkh frp sdq} j hwd ehwwhu slfwxuh ri lwrp dqdj hp hqwwhdp v/Uklv dxglwz runv z lwk wkh sduwlflsdwlrq ri rqh ru pruh frqvxowdqwr z kr ylvlw wkh ruj dql'dwlrq dqg uhylhz wkh p dqdj hp hqwsurfhgxuh z lwk wkh dlp ri lp surylqj sudfwlfdo p dqdj hp hqwh{shulhqfh (vhh Gj xuh 2)/B

p dqdj hp hqw dxglw lv frqgxfvhg e} vkh frpsdq}kl lqghshqghqw frqvxovdqw-irfxvlqj rq d fulwlfdodssurdfk vr vkh dfvlylwhv ri vkh hqwluh p dqdj hp hqwwhdp - udvkhu vkdq lqglylgxdov/

B p dqdj huldo dxglw lv d v}vwhp dwf vwxg} ri p dqdj hp hqw ghflvlrqv dqg dfwlrqv wr hydoxdwh shuirup dqfh/ Vqdnh dq h{whuqdo dxglw d p dqdj hp hqw dxglw p dlqdj ornv dwqrq.ilqdqfldo gdwd wr dvvhvv p dqdj hp hqwhiihfwlyhqhvv]6a/



VB лзу;. а uPu' узВиМилх Вк ВН в МуН у Ричи-ВаР z ВуМи ВР v лиВРуши сЕг

N dqdj huldodxglwwulhv wr vrp hkrz ilqg dqvz huv wr vkh iroorz lqj txhvwlrqv; krz grhv vkh p dqdj hp hqwri vkh frp sdq} p dqdj h vkh exvlqhvv- grhv vkh fkrvhq p dqdj hp hqwvv)ydn fruuhvsrqg wr vkh sxusrvh ri vkh j lyhq rshudwlrq- hwf/@wirfxvhv rq uhvxow- dvvhvvlqj vkh hiihfvlyhqhvv dqg frpsddqfh ri frqvurov- fkdodnqjlqj vkh xqghudylqj uxdnv-surfhgxuhv dqg phvkrgv/

Bxglwruv dqdd'h wkh ruj dql'dwlrqk vwwxfwxuh iurp ydulrxv frpshwlwyh shuvshfwlyhv/Uklv khosv wkhp wr ghwhup lqh krz pxfk lwhqdednv wkhp wr lqfuhdvh wkhlu frpshwlwyhqhvv/Jq wkh fdvh ri dq dxglw wkh frppxqlfdwlrqv}vwlnp rshudwlqj z lwklq wkh pdqdj hphqw iudphzrun ehfrphv d pdwhu ri glvfxvvlrq/Ukh pruh frqixvlqj ru frpsdn{ wkh ruj dql'dwlrqdovwwxfwxuh lv-wkh pruh dnhoj lwlv wkdwwkh frqvxowdqwz loovxjj hvwuhylvlqj lw vlpsdi}lqj wkh ghvlj q dqg iroorz. xs ri pdqdj hphqwlqirup dwlrq iorz v/frqyhuvlrq v}vwhpv/Bvlpsdn ruj dql'dwlrqdo vwwxfwxuh doorz v wr lpsuryh frppxqlfdwlrq iorz v dqg wr vroyh wkh surednpvidfhg e} wkh ruj dql'dwlrq pruh txlfnd/

Ukh h{lvvhqfh ri srvlvlyh uhodvlrqv ehwz hhq hp sor}hhv fdq khos wr lp suryh oderu vxsso} dqg lqfuhdvh vkh ghj uhh ri lqglylgxdo vdvlvidfvlrq ri vkh hp sor}hh/ Drqvxovdqw fdq frqgxfwhp sor}hh vxuyh}v ru frqgxfwlqglylgxdo lqvhuylhz v wr ehwhu xqghuvvdqg vkh ruj dql' dvlrqkl fxovxuh dqg hqylurqp hqv/ Ukh} dovr rivhq frooderudvh z lvk p dqdj huv- vxshuylvruv- dqg kxp dq uhvrxufhv surihvvlrqdov vr j hwd j rrg slfvxuh ri krz hp sor}hhv ihhoderxwd j lyhq z runsodfh/ vr z run vkhuh/ Ukh} fdq frp h xs z lvk hiihfvlyh vxj j hvvlrqv dlp hg dwlp surylqj uhodvlrqv ehvzhhq hp sor}hhv/

SIvn p dqdj hp hqw Iv dovr hvvhqvldo vr hqvxuh exvlqhvv vxvwdlqdeldvly/ Drqvxovdqw rivhq dqdd'h fxuuhqwulvn p dqdj hp hqw sudfwlfhv vr ghvhup lqh vlkhlu hiihfvlyhqhvv/ Ukh} frpsduh dfwxdo exvlqhvv uhvxov z lvk suhylrxv uhsruw lq rughu vr ehwhu xqghuvvdqg krz z hoovlkh ruj dql'dvlrq lv lpsdnp hqvlqj dssursuldvln surfhgxuhv/ Bivhu frqgxfvlqj srdf} uhylhz v-lqflghqwuhsruw-dqg frpsdulvrqv z lvk lqgxvwu} ehvw sudfwlfhv- frqvxovdqw duh dedn vr p dnh uhfrpphqgdvlrqv vr uhgxfh vlkh ruj dql'dvlrqlvl ulvnv/

Jq wkh p dqdj huldodxglwsurfhvv- wkh frqvxowdqw gr qrwe}sdvv wkh ilqdqfldovskhuh ri wkh ruj dql' dwlrq hlwkhu/ Jq wklv z d}- wkh} duh dedn wr lghqwli} rssruwxqlwlhv iru lpsuryhphqw lq krz wkh ruj dql' dwlrq p dqdj hv lwr dvvhw- lqyhqwrulhv dqg frvw/ X khq frqvxowdqw lghqwli} wkhvh rssruwxqlwlhv- wkh} duh dedn wr ghyhors vshfldo sursrvdov- wkdw frqwulexwh wr lqfuhdvlqj wkh frpsdq} wlyhqxhv rusurilwre} uhgxflqj frvwrdqg doorfdwlqj uhvrxufhv pruh hiilflhqwl/rue} lpsurylqj fxuuhqwp dqxidfwxulqj surfhgxuhv/

Bivhu vkh p dqdj huldo dxglw lv frpsohvhg- vkh frqvxovolqw suhsduh d ghwollohg uhsruwrq z kdwvkh} revhuyhg lq vkh surfhvv/ X khq p dqdj hp hqwvhdp v uhfhlyh vkh uhsruwiurp vkh vklug.sduv) frqvxovolqw- vkh} vyslfdoo} ehj lq ghyhorslqj d mlqwdfvhrq sodq iru vkh dxglvWl lghqvlilhg dfvhrq lvhp v/

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Ndqdj huldo dxglwsod}v dq lpsruwdqwuron lq rujdql'lqj dq hillflhqwexvlqhvv/ Jwgrhvqrwgxsolfdwn-exwfrpsonphqw wkh rshudwlrqdodxglwlNdqdj huldodxglwixqfwlrqvduh fxuuhqwod lqqhhg ri uhylhz-dv wkh} duh pruh irfxvhg rq lghqwli}lqj exvlqhvvpdqdj hphqwhillflhqf} uhvhuyhv/ Ukhuhiruh-wkh frqfoxvlrqv ripdqdj hphqwdxglwruv vkrxog eh prvwod uhodwng wr exvlqhvvrukdql'dwlrqdoixqfwlrqv-dqg qrwwrwkh lpsuryhphqwri exvlqhvvilqdqfldouhvxow/

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- 3/ LQNH/(31.2)/Ux t"t w.....'xxt yv ...

- $t y t \dots 2$ dydlodedn khuh;
- kwsv; Oddvvhw/nspj OfrqvhqvOgdp Onspj OurOsgi O31 2: OTrqgdmdxglwrul. lqvhuqlcSrpdqldcdsuldhc31 2: /sgi -ylvlvhg rq 21 vk ri Ndufk-31 31 /
- 4/ **a uPBu3f 53UMH H uNab 53Runx Bysv8d 53X BM/узани3] 5**(31 31)/ g' x wz...t" t y t ... yx x t"t w...t w... ... tv v t xz x t vx4Uhfkqrorj lfdoGruhfdvMqj & TrfldoDkdqj h- s/ 261 /
- 5/ SuBmBnBn3T5(31 27)/ Rt wwx xv... y ".. xu... x FM x xv... xy u" v"v't... xv' " z 4GqdqfldoJqqrydWrq- 3(31)-ss/2 21/
- 6/ **TuBZ3- j uuu35yMBa 5P5**(31 28)/ g t wu" v"v' t... ut xw t vv ...z t wt t vx/ Krxuqdori Jqirup dwrq T}vvhp v- 42(4)- 6 32/
- 7/ **huБл' БлзяиРЗРЗWзВ азяиРЗ] 52**(31 34)- Bxglwp dqx do Zhuhydq-Uqvhvdj hw- ss. 225.229

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Qk/E/ lq Ffrqrp lfv- Wdqdg' ru Twdwn Vqlyhuvlw) 4qlj j dkA p dløux

KMfgKdTKWbdaPTFTYfSOMaYfOjf aPOMa3KgNTFTYR

Kt Das unabukh hiilflhqf} ri hfrqrp lf dfwlylv) ri ruj dql' dwrqv lv fxuuhqwo) qrw hydoxdwng rqo) e} ilqdqfldo uhvxow- exw lv dovr ghwhup lqhg e} wkh hqylurqp hqwdofrqvht xhqfhv ri hqwuhs uhqhxu. vkls/ Jq wklv uhj dug- wkh hfr.dxglwlv lpsruwdqw zklfk xowlp dwno) surylghv d uhdvrqdeon rslqlrq derxwwkh hqylurqp hqwdodfwlylv)/ Ukh duwlfon glvfxvvhv wkh lpsuryhp hqwri lqirup dwrq rq wkh irup dwlrq ri dfwxduldosurilw-dulvlqj iurp wkh hqylurqp hqwdoshuirup dqfh ri ruj dql' dwlrqv lq wkh frqvh {wri hfr.dxglwlqj / Jqsdwlfxodu-sursrvdov duh p dgh iru wkh dffrxqwlqj ri ixwxuh ilqdqfldo iorz v dlp hg dw hqylurqp hqwdo dfwlylwhv dw wkh suhvhqw ydoxh- e} zklfk wkh hqylurqp hqwdoredj dwlrqv ri ruj dql' dwlrqv duh suhvhqwhg zlwk p ruh uhddeon hvwlp dwnv lq wkh sxedvkhg ilqdqfldouhsruw/ Bffrxqwdeldw) ri hqylurqp hqwdo ilqdqfldo redj dwlrqv dwsuhvhqwydoxh qrwrqo) lqfuhdvhv wkh fuhgleldw) ri wkh hfr.dxglwfrqfoxvlrq- exw dovr lpsuryhv wkh ilqdqfldodxglwfduulhg rxwlq ruj dql' dwlrqv/

VWOL NEV OD df wx duldo s urilw hfr.dx glw ilqdqfldo vwdwhp hqw-hqylurqp hqwdoilqdqfh-ilqdqfldodx glw

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d wΔvs Էuz s'PD w vxep lw uhfrp p hqgdwrqv iru lp surylqj hqylurqp hqwdodxglwlqirup dwrq surylvlrq/ d w Δvs Δv

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Bq df wx du} x vhv vwdwlwlf do dqg suredeldw) wkhru} p hwkrgv wr p dnh d vflhqwlilf suhglf wrq ri ix wx uh hfrqrp lf uhvx ow/ Bqg dq} ir uhfdvw dqg hvshfldæ) wkh h{shf whg hfrqrp lf frqvht x hqfhv ri orqj. whup hqylurqp hqwdodf wlylwhv-gr qrwlghdæ) fruuhvsrqg wr wkh df wx do uhvx ow ri ix wx uh fdvhv dqg wudqvdf wlrqv/ Ukhuhiruh- wkh ghyldwlrqv ri wkh df wx do hfrqrp lf uhvx ow sædqhg dqg ir up hg e} wkh df wx du} lq vkh s dvwduh s uhvhqwng dv df wx duldos urilw ru or vvhv lq wkh ilqdqfldo vwdwnp hqwr ri ruj dql' dwlrqv fduu} lqj rx whqylurqp hqwdo df wlylwhv]2a/ Ukxv- wkh exvlqhvv sulqflsoh ri vx vwdlqdeon ghyhorsp hqwredj hv ruj dql' dwlrqv wr ix uwkhu uhvwruh x vhg qdwx udouhvrx uf hv/ Odwx udog)-gx ulqj wkh s hulrg ri qdwx udox vhwkh ruj dql' dwlrq vkrx og p dnh d uhvhuydwlrq ri ix qgv iru wkh uhvwrudwlrq ri qdwx udo uhvrx uf hv frqvx p hg dv d uhvx owri ex vlqhvv dwwkh h{shqvh ri h{shqvhv/}}

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I huh-d surednp z loo dulvh iru vkh uhddedn suhvhqwdwlrq ri vkh uhvhuyh ixqg lq vkh ilqdqfldo vwdwlnp hqwr ri vkh ruj dql'dwlrqvehfdxvh vkh h{dfw fddixodwlrq ri vkh gxudwlrq ri vkh srvvledn uhvwrudwlrq ri vkh ghsohwlng qdwxudo uhvrxufhv frqwdlqv d kljk suredeldwly]3a/ Ji vkh ruj dql'dwlrq p dqdj hv wr uhvwruh vkh qdwxudo uhvrxufhv frqvxp hg dv d uhvxow ri exvlqhvv lq d shulrg qrw h{fhhglqj vkh dfwxduldo iruhfdvwr dqg z lvk p lqlp do frvwr vkdq

sodqqhg-lwzloo"vdyh" wkh uhvhuyh ixqg dlp hg dw hqylurqp hqwdo surwhfwlrq dqg wkhuhe} irup dq dfwxduldosurilw Jq wkh rssrvlwh fdvh-zkhq wkh dfwxduldoiruhfdvw ri uhvwrudwlrq ri ghsdhwhg qdwxudo uhvrxufhv duh xqghuhvwlp dwng erwk lq whup v ri wlp h dqg uhvwrudwlrq ydoxh- wkhq wkh ruj dql'dwlrq zlookdyh dq dfwxduldoorvv lq whup v ri uhvwrudwlrq ri qdwxudouhvrxufhv/Jq wklv vhqvh-zlwklq wkh iudp hz run ri wkh ilqdqfldo frqwuro v}vwhp ri hqylurqp hqwdo dfwlylw ri ruj dql'dwlrqv- dfwxduldo hydoxdwlrqv duh lqfoxghg- dv d uhvxow ri zklfk wkh ixqgv uhvhuyhg iru wkh sxusrvh ri hqylurqp hqwdo surwhfwlrq- dv zhoodv wkhlu ixuwkhu xvh dqg wkh ghwhup lqdwlrq ri wkh ilqdo ilqdqfldo uhvxow duh frxqwhg dqg ydoxhg/ Jq fdvh ri suhvhqwdwlrq ri dfwxduldosurilwru orvv ri hqylurqp hqwdodfwlylwlhv lq ilqdqfldouhsruw ri ruj dql'dwlrqv-d qxp ehu ri surednp v dulvh/

PLOG dwykh h{shqvh ri vkh ruj dql'dwrq-gxulqj vkh }hduv ri fravwuxfwlra ri wkh krwho frpsoh{- d ixag ri hayluraphawdo survhfyling frpshqydylingv lv irup hg yr ykdwykh redij dyling ri ykh ghildng frpshqvdwrqv lv suhvhqwng dwwkh suhvhqwydoxh 14a/ Ukh ghp dag iru vkh suhvhawydah dvvhvvp hawri ghilahg ehahilw lv suhvhqvhg e} vkh SB Mdz rq Bffrxqvlqj dqg JBT 2 vvdqgdug-zklfk sxuvxhv vzr irdov; lghqvli} vkh ruidql'dvlrqkl orqi.vhup uhvsrqvleldwlhv z lvk vkh prvwuhddvvlvf ydaxh (suhvhqwydaxh)-zklfk z loop dnh lwsrvvledn-z lvkrxwh{dji hudvlrq-vr suhvhqwvkh uhvhuyh ixag iru haylurap hawdogdp dj h frp shavdwra z lwk wkh ahwdp rxaw (plaxv fdslvodo jurzvik lavhuhvvi)- grw vir dwulexvin vikh dprxawri haylurap hawdo gdp dj h frp s haydwra frp s dn who frqvwuxfylrq shulrg frvw- exwyr gliihuhqyldyln dffruglqi yr ykh suhvhawydah dag lavhuhvwh{shavhv-lafagh vkh lavhuhvwla vkh h{shqvhv ri vkh rujdql'dwlrq gxulqj vkh srvwfrqvwuxfwlrq

(rshudwlrq) }hduv ri vkh krwhofrpsdn{- dqg vkh suhvhqwydoxh ri frpshqvdwlrq.gxulqj vkh frqvvwxfwlrq}hduv]5a/

Ukxv- ohwld fdofxodwh wkh suhvhqwydoxh ri frpshqvdwlrq iru hqylurqphqwdogdpdjhgxh wr wkh frqvwuxfwlrq ri wkh krwhofrpsoh{z lwk wkh khos ri 8-717 frhiilflhqwr ri 21 % dqqxlwy iru 26}hduv;

dqqxdoixvxuh ydoxh ri vkh s d} p hqw{ dqqxlv} frhiilflhqw > 5 111 { 7/256 > 35 691

Ukhq- dnvkl ghwhup lqh vkh shufhqvdj h frvwlqfoxghg lq vkh ixuwkhu frpshqvdwlrq iru vkh gdp dj h fdxvhg wr vkh hqylurqp hqw gxulqj vkh}hduv ri rshudwlrq ri vkh krwhofrp soh{;

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Cdvhg rq vkh uht x luhp hqw ri ilqdqfldouhs ruwlqj vwdqgdugv-vkh s uhvhqw ydoxh ri ix vx uh ehqhilwr lv lqfoxghg lq vkh frvwr ri vkh ruj dql' dwrq iru vkh } hduv ri frqvwuxfwlrq z run/ Bqg vkh lqwhuhvw h{s hqvh lqfoxghg lq vkh ix vx uh ehqhilwr vkrx og vwloo eh s rvwsrqhg dqg uhfrj ql' hg dv dq xqhduqhg lqwhuhvwh{s hqvh vr vkdwlwfdq eh dwwlex whg wr vkh h{s hqvhv ri vkh ruj dql' dwlrq lq vkh } hduv ri rs hudwlrq ri vkh krwho(vhh wdech 2- froxpq 4)/ Bv s uhvhqwhg lq wdech 2- vkh wrvdo dp rxqw ri vkh s uhvhqw ydoxh ri frp s hqvdwlrqv iru hqylurqp hqwdo gdp dj h (35691) dqg vkh lqvhuhvw h{s hqvh qrw lqfxuuhg (26531) lv glvwulex whg ht xdod) ehwx hhq vkh 6 } hduv ri frqvwuxfwlrq ri vkh krwho frp s dn{/ Jq vklv fdvh- ix uwkhu frp s hqvdwlrqv ghwhup lqhg iru hqylurqp hqwdo gdp dj h z loo eh dvvlj qhg vr vkh h{s hqvhv ri vkh ruj dql' dwlrq lq d xqlirup dqg ht xdo p dqqhu/

ewu 'Aw 4 gxulqj wkh frqvwuxfwlrq-rqd wkh suhvhqwydoxh ri wkh ghilqhg frp shqvdwlrqv iru hqylurqp hqwdogdp dj h lv dwulexwhg wr wkh h{shqvhv ri wkh ruj dql' dwlrq-dqg wkh uhp dlqlqj ydoxh ri wkh ixoofrp shqvdwlrqv gxulqj wkh }hduv ri frqvwuxfwlrq lv irup xodwhg

dv dq xqhduqhg lqvhuhvwh{shqvh lq rughu wr eh dwwlexvhg wr vkh h{shqvhv ri vkh ruj dql' dwlrq lq vkh irærz lqj }hduv ri rshudwlrq ri vkh krvhofrp sdn{/ Txfk d vlp h glylvlrq ri frvwr lv surylghg e} vkh fxuuhqwfkduwri dffrxqw/

huv My;. Т Выи'' зу' инух взушу РнинВыР аz хуz ВРух v у Руз Вк в МиРи v я взушу Рк ни Му и Рх ВРнузу ик в ия Н у Рк. н Балии Рх ЗРа Т 0

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 $z\;khq\;dvvlj\;qlqj\;\;\textit{vk}\;h\;s\;\textit{uh}\;vhq\;\textit{wy}\;d\alpha\;h\;r\;i\;\;ghilqhg\;s\;\textit{od}\;q\;ehqhilw\;\;\textit{wr}\;\;\textit{vk}\;h\;$ $frvw\;r\;i\;\;\textit{vk}\;h\;r\;uj\;\;dql'\;dMr\;q<$

 $X ext{ khq irup } x ext{ advlqj } ext{ vkh } x ext{q lqf} x ext{ uuhg lqvhuhvwh} \{ ext{s hqvh/}$

Ukxv-dffrxqwOr/525-dfwlqj dv d frqwud sdvvlyh-dgnavw wkh edodqfh ridffrxqwOr/537-hydoxdwlqj wkh uhvhuydwlrq riehqhilw ghilqhg lq lwdwwkh suhvhqwydoxh/l dylqj irup xodwng wkh dffrxqw fruuhvsrqghqfh gxulqj wkh 6 }hduv rifrqvwuxfwlrq-dwwkh wlph risxwwlqj wkh krwnofrpson{ lqwr rshudwlrq-zh z lookdyh wkh dffrxqw lwnp v dviroorzv;

Exulqj wkh }hduv ri rshudwirq ri wkh krwho frpsch{- wkh redj dwirq wr frpshqvdwh iru hqylurqp hqwdogdp dj h lv sdlg rii lq wzr lqvwdop hqwr; suhvhqwydoxh dqg lqwhuhvwh{shqvh/ Exulqj wkh }hduv ri rshudwirq ri wkh krwho frpshqvdwirqv iru hqylurqp hqwdogdp dj h gxulqj frqvwuxfwirq duh frpshqvdwirqv iru wklv sxusrvh iurp wkh uhvhuyh ixqg ri frpshqvdwirqv douhdg} dffxpxodwing gxulqj wkh }hduv ri frqvwuxfwirq-rq wkh rwkhu kdqg-lqwhuhvwfrvw qrw lqfxuuhg duh j udgxdog} fuhglwing wr wkh dfwxdo frvwr ri wkh ruj dql' dwirq/ Jq wklv fdvh-iru wkh sxusrvh ri hydoxdwiqj wkh lqwhuhvw frvwr ri hdfk }hdu ri krwhorshudwirq- wkh hqylurqp hqwdogdp dj h frpshqvdwirq lv glvfrxqwing e} wkh suhvhqwydoxh idfwru uhodwing wr wkh vdp h }hdu (vhh wdech 3-froxpq 3)/ Ukhuhiruh-frpshqvdwirq iru gdp dj h wr wkh hqylurqp hqwgxulqj wkh srvwyfrqvwuxfwirq shulrg lv irup xodwing z lwk wkh iroorz lqj fruuhvsrqghqfh;

Ukh iluvw }hdu ri rshudwrq ri wkh krwho frpsoh{; zkhq wudqvihuulqj hqylurqphqwologdpdjhiurp wkh vhwohphqwdffrxqwk

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Ukxv-gxulqj vkh 21 } hduv ri vkh rshudwrq ri vkh krvnofrp s dn {-e} irup x odvlqj vkh deryh.p hqwlrqhg fruuhvsrqghqfhv- vkh edodqfhv ri dffrxqw Or/537 dqg Or/525 z loo hyhqvx dog} ehfrp h 'hur/I rz hyhu- lq s udf vlfh vklv lv x qolnho}- dv vkh df wx duldo hvvlp dvh ri vkh uhfryhu} vlp h iru hqylurqp hqwdo gdp dj h vkrx og j hqhudog} ghyldvh iurp vkh h{df ws uhglf vlrq/}

Ji vkh uhvvrudvlrq ri vkh qdvxudogdpdjh fdxvhge} vkh krvhofrpsdh{ wdnhv pruh vkdq21 }hduv-vkh rujdql'dvlrqzloovvlooeh redjhgvrfrpsdhvh vkh hqylurqphqwdouhvvrudvlrqv-frqvlqxlqjvkh gdpdjhviurpvkh dqqxdovhwohphqwdffrxqweh}rqgvkh dfvxduldoorvrlqvkh edodqfh vkhhv/v

huv My А. Т Вымал РыБР' и Рх взушу РышыБаР аz х уzБРух v у РузБк в МаРи и к взушу Рк ни Му и Рх БРыузушк зину

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7	1-:1:	5111	4 747	9=:
8	1-937	5111	4 41 5	=C=
9	1 -862	5111	4115	CC=
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A	1 -624	5111	3163	7 C: B
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Exulqj vkh frqvwuxfvlrq ri vkh krvho frpsoh{- divhu vkh uhvvrudvlrq ri vkh hfrorjlfdo edodqfh ri vkh odnh dqg vkh vxuurxqglqj iruhvwfryhu- lq fdvh ri ghyldvlrqv ri vkh dfvxdo dqg sodqqhg frpshqvdvlrqv-vkh dfvxduldosurilw(orvv) lvirup xodvlng/vkh edodqfh dqg vkh uhvvrudvlrq ri vkh vxuurxqglqj iruhvvvfryhuz loovolnh sodfh vxr}hduv odvlnu vkdq vkh dfvxduldodvvhvvp hqw-vkdwlv-gxulqj

vkh 23 } hduv ri rshudwrq ri vkh frp soh{-vkhq dq dfvxduldoorvv z loorffxu dqg iru hdfk dgglwrqdo} hdu lwz looeh irup xodwng;

Pvkhuz lvh-z khq vkh uhvvrudvlrq ri vkh gdp dj h grqh vr qdvxuh lv frpsdnvng 3 }hduv hdudvhu vkdq vkh dfvxduldoiruhfdvvv-vkdwlvgxulqj vkh 9 }hduv ri rshudvlrq ri vkh krvnofrpsdn{- vkhq e} z ulvlqj rii vkh edodqfhv ri dffrxqw Or/ 525 dqg Or/ 537- dq dfvxduldosurilwz looeh irup hg z lvk vkh iroorz lqj fruuhvsrqghqfh;

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X khq vkh edodqfh ri dfwxduldo surilwru orvv lq vkh ilqdqfldo vwdwhp hqw ri vkh ruj dql'dwlrq fduu}lqj rxwhqylurqp hqwdodfwlylwhv lqfuhdvhv-vkhq dffruglqj vr vkh iroorz lqj }hduv-vkh} duh z ulwwhq rii sduwe} sduw rq vkh dffrxqwri h{shqvhv ru lqfrp h}7a/

Ukxv- vkh dssdfdWrq ri vkh dfwxduldo uhvxow hydoxdWrq phfkdqlvp ri hqylurqphqwdodfwlylWhv-rq vkh rqh kdqg-surylghv dq rssruwxqlw) wr pdqdjh vkh hfrqrplf ulvnv ri hqylurqphqwdodfwlylWhv-dqg rq vkh rvkhu kdqg-fuhdWnv suhfrqglWrqviru dpruh fuhgledn suhvhqwdWrq ri hqylurqphqwdoredjdWrqvlq vkh ilqdqfldovwdWnphqwri rujdql'dWrqv]8a-zklfklvh{wuhphd}lpsruwdqwzkhqpdnlqjpdqdjhuldoghflvlrqvlq vkhilhqgriqdwxudoxvh/

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- 2/ JGST T2 HhqhudoSht x luhp hqw iru E lvf orvx uh ri Txvvdlqdeldv). uhodvng Gqdqfldo Jqirup dvlrq- Jqvhuqdvlrqdo Txvvdlqdeldv) Tvdqgdugv Crdug-31 33
- 3/ Rnuna3SJ SaPuaMPxBSJ Uwwyu3f 5NJ gazzu3U5P Quhdp Iqdu} Bqdg vlv ri TBTC Shsruvlqj; Elvforvxuh Urslfv- GqdqfldoShdnydqfhdqg vkh GqdqfldoJqvhqvlvy ri FTH Ndvhulddvy/ K Bsso Drus/ Gqdqfh/3131-43-228 236/
- 4/ Zas' yPuyP3g5 a 3au3P5 d yxysuyP3] 52th5Txvwdlqdeldw) uhsruwlqj dqg dssurdfkhv wr p dwhulddw); Uhqvlrqv dqg srwhqwldouhvroxwlrqv/Txvwdlq/Bffrxqw/Ndqdj/Qrdf} K/ 31 32-24-452 472/

5/ **3 52**- **00** K 6 3 (21) 31 339 (lq Bup hqldq)

- 6/ **huБл' БлзяиРЗР5** Drqvhs wxdolvvxhv ri dffrxqvlqj ghyhors p hqw 000qdqfh dqg Bffrxqvlqj vflhqvlilf mxuqdo 2(:) 31 33-ss/7.26
- 7/ Ryvv B' raP3Zj i Py3HuP3Z5Bgydqflqj uhvhdufk lqwr dffrxqwlqj dqg wkh VO Txvwdlqdeldw) E hyhorsp hqwHrdov- Bxglw/ 31 31 - (44)- 2768 2781/
- 8/ **huБл' БлзяиРЗР**4 N dqdj huldodx glwlqj lqirup dwlrq surylvlrq lvvx hv-00Gqdqfh dqg Bffrxqvlqj vflhqvlilf mxuqdo 3(21) 31 33-ss/42.56/

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OYegdTYR PTYKYMTKWeOMgdTfk TY fSOPKMOaP MaXbOfTfTaYLOfi OOYYKfTaYKWKYN OWOMfdaYTM MgddOYMTOe

Kt Das und Ukh hqylurqp hqwfuhdwng lq lqwhuqdwrqdop rqhwdu} uhadwrqv lq wkh advw ghfdgh iraorzlqj wkh joredo ilqdqfldo dqg hfrqrp lf fulvlv fdx vhv p ruh frqfhuqv wkdq rs wlp lvp - erwk lq whup v ri wkh ilqdqfldo v}vwhp v ri wkh qdwlrqdo hfrqrp lhv ri lqglylgx do frxqwulhv- dv z haodv wkh ix wx uh frx uvh ri wkh z ruag hfrqrp }/ Ukhuh duh dovr p dq} frxqwulhv wkdwkdyh qrwhyhq ryhufrp h wkh vhfrqg z dyh ri wkh joredo ilqdqfldo dqg hfrqrp lf fulvlv- wkh h{whuqdo ghew fulvlv (Huhhfh- Ts dlq- Qruxxj do I raodqg- hwf/)/ Bqg lq d eurdghu vhqvh- erwk lq wkh hfrqrp } dqg lq wkh ilqdqfldov}vwhp - wkh j hqhudo xqfhuwdlqw lv lqfuhdvlqj/

LOWu Tv wD R76

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downuqdwlyh p hdqv iru lqwhuqdwlrqdo sd}p hqw lq wudgh dqg frrshudwlrq/

d w Luz z The LDD Drpsduhg wr wkh dssurdfkhvedvhg rq fodvvlfdo wkhru} uhodvhg wr prqh}- frqvhpsrudu} h.fxuuhqf} rshudvhrqvkdyh d qxpehu ri dvshfw/ Ukh urdn ri vkh hohfwurqlf fxuuhqf} z lvk lw ydulhvhvzlooj urz ixuvkhu ghvslvh vkh dwhpsw ri qdvhrqdoj ryhuqphqwdqg vkh fhqwudoedqnv wr dplwvkh flufxodvhrq ri hohfwurqlf fxuuhqf} dqg wr fuhdvh lqvvlwxvlrqdoeduulhuviru lwxvh/

d wΔvs Էuz ԳԴԻԽԱԹՅDs ruwud} wkh fkdoshqj lqj hqylurqp hqwdiwhu wkh j oredo ilqdqfldo fulvlv- dv z hoo dv frqvlghu wkh surv dqg frqv uhodwng wr wkh flufxodwrq ri wkh hohfwurqlf fxuuhqf} lq wkh z ruog hfrqrp} lq frqnaqfwlrq z lwk wkh p dlq wuhqgv dqg ghyhorsp hqw wdnlqj sodfh lq uhj lrqdo lqwhj udwrq- s duwlfxoduo}- lq wkh Fxudvldq Ffrqrp lf Vqlrq dqg lq orfdohfrqrp lhv-lqfoxglqj Bup hqld/

40000 + 10000

Bup hqldqv- duh s duwlf x odud
) lqvhuhvvhg lq vkh p hqvlrqhg lvvx hv ir u dwdhdvwwk uhh uhdvrqv/

. Jq vkh }hduv ri lqghshqghqfh- vkh hvvaledvkhg- hyhq frpshvlwlyh dqg vvaledn ilqdqfldov}vvhp lq vkh srvwTrylhwvhuulvru}idfhv fhuvallq ulvnv/ Fyhq lq vkh }hduv z khq vkh qdvlrqdofxuuhqflhv ri vkh qhlj kerulqj frxqvulhv . vkh Uxunlvk dud- vkh B'huedladql pdqdw vkh vzr Judqldq fxuuhqflhv- vkh Hhruj ldq adul . z huh ryhuydoxhg- vkh Bup hqldq gudp z dv dgydqvalj hrxvdy glvvlqj xlvkhg e} d vvaledn vudrhfvru}- dqg z kdwlv p ruh lp sruvalqwiru vkh hfrqrp}-e} d fhuvallq suhglfvaleldvy/ Ukh }hdu 31 33 eurxj kwqhz fkdodhqj hv vr vkh qdvlrqdofxuuhqf}-z klfk p d} frqvlqxh lq 31 34 dv z hog/

. I rz wr hqvxuh wkh ilqdqfldovhfxulv) ri wkh frxqvu) lq wkh frqglwlrqvri frqvlqxrxv wxuexdnqfh ri wkh fxuuhqflhvri wudgh dqg hfrqrp lf sduwqhuv- j oredoxqfhuwdlqv) dqg xqsuhfhghqvlng ilhufh frpshvlwlrq ehvzhhq hdnfvurqlf fxuuhqflhv dqg qdvlrqdofxuuhqflhv/

. Ur z kdwh{vhqwlwlv s rvvledn wr lqvx uh vkh qdwlrqdohfrqrp} lq vkh s urfhvv ri irup dwlrq ri vkh xqlilhg ilqdqfldop dunhws odqqhg z lvklq FBFV lq 31 36- dv d uhvx ovri lwdqg lq vkh i roorz lqj $\}$ hduv/

Pi frxuvh- lw lv gliilfxow wr ilqg h{kdxvwlyh dqvzhuv wr wkh irup xodwng surednp v wrgd}-exwlwlv lp sruwdqwwr lqflwn dqg suryrnh glvfxvvlrqv z lwk wkh sduwlflsdwlrq ri wkh vflhqwlilf frp p xqlw}-zklfk z loo khos ghyhors uhddvwlf vfhqdulrv wr hqvxuh wkh vxvwdlqdeon ghyhorsp hqwri wkh qdwlrqdohfrqrp} dqg lwrilqdqfldofrp srqhqwl

d wΩvs Łuz ŁwΩdUAŁ

Peylrxvq-dowkrxjk fdvk lv d idvw dqg hiilflhqwphwkrg ri sd}phqw wkhuh duh pdq} gudzedfnv wr lw xvh «2/.1 roglqj fdvk frphvzlwkpdq} frvw-lqfoxglqj iudxg-fdvk orvvhv-ghsrvlw-dqg prqh} pdqdjhphqwfrvw dwilqdqfldo lqvwlwxwlrqv/ Ukh jrdo ri hdnfwurqlf prqh} lv wr uhsodfh vpdoo fdvk zlwk vpdoo ydoxh wudqvdfwlrqv-wkxv dyrlglqj orrskronv vxfk dv Gudqfhldh h{shulhqfh zlwk Nrqhr]3a/ Nrqhr lv ghvljqhg wr uhgxfh sxufkdvlqj srzhu frvw e} whpsruduloj wudqvihuulqj ixqgv pruh hiilflhqwd/ Uklv vwuxfwxuh vkrxog eh dssdhg wr ydulrxv uhwollowudqvdfwlrqv ri vpdoohu ydoxh wr xovlpdwhoj ehfrph pruh hiilflhqw/ Nrqhr riihuv juhdw ehqhilwr iru frqvxphuv dqg uhwollohuv/ Ukh ehqhilwr ri frqvxphuv duh wkh iroorzlqj; juhdwlnu vshhg ri wkh wudqvdfwlrq dqg d srvvledh ehqhilwlq wkh irup ri d glvfrxqwiru ixwxuh sxufkdvhv/ Nrqhr fdug kroghuv vkrxog kdyh ihzhu edqn fdugv-hvshfldog li wkh ihdwxuhv ri ghelwdqg fuhglwfdugv duh wolnhq lqwr dffrxqw dqg wkh} z loo ihho

pruh vhfxuh z lvk lv/ N hufkdqw z loo uhfhlyh ixqgv ehiruh vklsslqjsk}vlfdojrrgv ru vhuylfhv-fxvvrp hu or}dovy z loo lqfuhdvh-dqg vkh sd}p hqw surfhvv dw vkh srlqw ri sxufkdvh z loo ehfrph idvvhu-vkhuhe} uhgxflqj vkh frvwri vkh wudqvdfvlrq/

Jq j hqhudo vkhuh duh vwloo gliihuhqw dqg frqidfvlqj rslqlrqv derxwwkh ixwxuh ri hdnfwurqlf fxuuhqf}/ Ukh rsvlp lvvllf dssurdfk vr xvlqj fu}svrfxuuhqf} vxssruw vkh idfwvkdwwudqvdfvlrqv duh hdvld grqh ehwz hhq vzr sduvlhv/ Ukhvh prqh} vudqvihuv duh grqh dw plqlp dofrvw z klfk doorz v xvhuv vr dyrlg oduj h ihhv fkduj hg e} edqnv/ Bgglvlrqdod-pdq} frxqwulhv kdyh vvoluvlng dffhsvlqj Clvfrlq dv d fxuuhqf}/ Jq sduvlfxodu-frxqvulhv vkdwdlp vr j hwulg ri fdvk kdyh d yhu} idyrudedn dssurdfk vr frglilfdvlrq/ Ukh duj xp hqwvkdw prvwshrson xvh lv vkdwvkh p dunhwfdslvodd dvlrq ri Clvfrlq dqg rvkhu fu}svrfxuuhqflhv p dnhv vkh fu}svrfxuuhqf} p dunhw yhu} oduj h dqg srzhuixo dqg d edq zrxog eh h{shqvlyh iru hyhu} frxqwu}/ Urgd}- vkh vrvolo ydoxh ri doo frghv kdv uhdfkhg vhyhudo kxqguhg eloorq grooduv/

a ...y't ... 20kh p d{lp xp dp rxqwri fx uuhqf} lv vwulf wð dip lvhig (iru h{dp s dh- Clvfrlq; 32 p lodrq)]4a/ Tlqfh vkhuh duh qr srdwlfdo irufhv ru frusrudwrqv wr fkdqj h vkdwrughu- vkhuh lv qr urrp iru lqiodwrq wr ghyhors lq vkh v}vwhp/ Jq qhwz runv- vkhuh lv qr vlqj dh vhuyhu vkdw lv uhvsrqvledn iru doo rshudwrqv/ Ukh h{fkdqj h ri lqirup dwlrq (lq vklv fdvh . p rqh}) wdnhv sodfh vkurxj k 3 wr 4 ru p ruh vrivz duh fdhqw/ Booduh lqvwdodng e} ghyhorshuv z kr duh sduw ri vkh qhwz run/ Uudqvdfvlrqv duh h{hfxvhg iurp kxqguhgv ri glvwulexvhg vhuyhuv/ Ohlvkhu edqnv qru j ryhuqp hqw fdq frqwurovkh h{fkdqj h ri p rqh}/ Vqdp lvhg wudqvdfvlrq s rvvleldvlhv iru hdfk shuvrq vr sd} dq}rqh- dq}z khuh/ Ukh wudqvdfvlrq fdqqrw eh

prqlwruhg ru suhyhqwng-vr wudqvihuv fdq eh pdgh dq}zkhuh wkh xvhu lv z lwk wkhlu z dodnw/

g'xx... v'tzxy wxv't..z''... x-4Dxuuhqf} fdqqrweh frxqvhuihlvhg-frslhg ru vshqw vz lfh/ Ukhvh ihdwxuhv j x dudqvhh vkh lqvhj ulvy ri vkh ilhog v}vvhp/Ehfhqwudd'dwrq. vkhuh lv qr fhqwudo frqwurodqj dxvkrulvy lq vkh qhwzrun- vkh qhwzrun uhihuv vr doo s duvlifls dqw- vkh phpehu ri hdfk frpsxvhu z lvk d vhfuhwfxuuhqf} lv d phpehu ri vklv v}vvhp/Uklv phdqv vkdwvkh fhqwudoj ryhuqp hqwkdv qr srz hu vr ure vkh rz qhuv/Bqg hyhq li vrph s duw ri vkh qhwzrun lv riidqh- vkh sd}phqw v}vvhp z loo frqvlqxh vr z run/

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 $g\ t\ t\ x\ v\ /\ Jwp\ dlqwdlqv\ d\ klvwru\}\ ri\ wudqvdfwlrqv\ vkdwkdyh\ wdnhq s adfh/Jwlv fdadhg earfn earfn/ Carfn lqirup v\ derx\ whyhu\} vklqj/ Tr li\ d\ frp\ sdq\ sxedif\ xvhv\ d\ Cl\ wfrlq\ dgguhvv-\ hyhu\}rqh\ fdq\ vhh\ krz\ p\ xfk\ Cl\ wfrlq\ vkh\}\ rz\ q/\ Ji\ vkh\ frp\ sdq\ dgguhvv\ lv\ qrw\ sxedivkhg-qr\ rqh\ z\ lao\ nqrz\ vkdwlwehorqj\ v\ wr\ vkl\ v\ frp\ sdq\}/\ Gru\ frp\ s\ dhv\ h\ dqrq\ p\ l\ y\-frp\ sdqlhv\ xvh\ d\ xqlt\ xh\ Cl\ wfrlq\ dgguhvv\ iru\ hdfk\ wudqvdf\ wrq/\$

Jq vkh CUD qhwzrun- doo lqirup dwlrq derxwvkh wudqvdfwlrq lv vkduhg- exwvkhuh lv qr gdwd iru vkh uhflslhqwru vkh vhqghu (qr shuvrqdolqirup dwlrq ri vkh rz qhu)/

g t tv... xxw. deldw) wr wudqvihu p rqh} dq}z khuh- hwf/ Pssrqhqw ri fu}swrfxuuhqf} dujxh wkdwfu}swrfxuuhqflhv duh klj kg yrodwich dqg fdq eh xvhg iru p rqh} odxqghulqj ru lodnj do dfwlylwhv/ Jq wklv uhj dug- iru h{dpsdn- l xpskuh} j lyhv uhdvrqv z k} fu}s wrfxuuhqf} lv qrwd yldedn hdnfwurqlf fxuuhqf}]5a/ I h vwdwhv wkdw Clwfrlq lv wulyldodqg vkrz v sulfh yrodwldw) dqg wkh glvfrxqwhg fdvk ydoxh ri Clwfrlq lv 'hur/ Bgglwlrqdog}- kh qrwhv wkdwwkh fxuuhqf} kdv qr fhqwudolvvxhu- dqg wkhuh lv qr ilqdqfldoru hfrqrp lf edvlv iru lw fuhdwlrq/ Elvdgydqwdj hv lqfoxgh vwurqj yrodwldw)- wklv yrodwldw) lv d surednp lq wkh vkruwwhup]6a/

Qhrsdn grqlMvvvrs lqyhvvlqj z lvkrxwsurshu nqrzdngj h dqg orvh p rqh}/

[tv" y " "xwzx4 Qhrsdn grqlwwnqrz krz wr surwhfw wkhp vhoyhv iurp f}ehu dwwdfn dqg wkhuhiruh vxffxpe wr wkh z loori kdfnhuv/ Ukhuh lv qr z d} wr fdqfhowkh sd}p hqw li wkh wudqvihu lv p lvwdnhqd p dgh wr dqrwkhu shuvrq- wkhuh lv qr z d} wr uhixqg wkh sd}p hqw/ Jwlv rqd srvvledn wr dvn wkh shuvrq wr uhwxuq wkh p rqh}dqg li wkh uht x hvwlv uhrhfwng- wkhq }rx novwkdyh wr iruj hwderxwwkh p rqh}/

Ukh p dlq ulvnv ri lqyhvvlqj lq frusrudvln fxuuhqflhv vkdwvkrx og eh frqvlghuhg lq vkh p hglxp dqg orqj vhup/

Ndq} h{shuwr ehdhyh wkdw wkh dvw ri glvdgydqwdjhv ri fu}swrfxuuhqflhvlvpxfkorqjhudqguhodwngwrprqh}odxqghulqj-whuurulvwilqdqflqjdqgrwkhulodnjdodfwlylwhv]7a/Ndq}vfkroduvdqgh{shuwrdujxhwkdwwkhixwxuhrifu}swrfxuuhqf}lveuljkwdvlwzloohdplqdwnwudgheduulhuvdqgplggdnphq-uhgxflqjwudqvdfwlrqfrvw-wkhuhe}errvwlqjwudghdqgwkhhfrqrp}]8a/

Ddq Clwfrlq I lgh Dulp lqdov@ Glyh }hduv djr- Clwfrlq ghprqvwdwng wkh srvvleldwy ri dqrq}p lwy/ Cxw wkdwW fkdqj lqj-vwduwlqj z lwk wkh GCJ dqg rwkhu odz hqirufhp hqwdj hqflhv/ Nrvwri Clwfrlql xvhuv duh shrson z runlqj lq odz-z klfk kdv udlvhg sulydf}frqfhuqv/ Ukhuh duh dovr shrson z kr vhh dqrq}p lwy dv d wrroiru ilqdqfldo fulp h/ Uklv z dv dq dwnpsw dw d yluwxdo fxuuhqf}

vhwohp hqw/ Hryhuqp hqw duh nqrzq wr eh lqwhuhvwhg lq yluwxdo fxuuhqflhv dv wkh} frqwlqxh wr j dlq uhfrj qlwlrq/ Ukxv- lq 31 24- wkh VT Uuhdvxu} lvvxhg d gluhfwlyh rq krz wr xvh glj lwdofxuuhqf} dqg p rqh} wudqvihuv]9a/ Bw wkdw wlp h- fhuwdlq vwhsv z huh wdnhq wr uhj xodwn Clwfrlq- z klfk p hdqv wkdwwkh vhfuhwfxuuhqf} vkrxog eh uhfrj ql'hg dv wd{dedn surshuw}/ Uudqvdfwlqj lq glj lwdofxuuhqflhv kdv ehfrp h rqh ri wkh suhihuuhg sd}p hqwp hwkrgv dv lwsurylghv dqrq}p lw) dqg sulydf}/

Ukh uhj xodwru} odqgvfdsh iru glj lwdofxuuhqflhv lv eljj hu wkdq sxedif survhifvlrq dqg frp edvlqj fulp lqdo dfvlylvly/ I rz hyhu- fduh p xvweh wdnhq wr dyrlg vkh ghyhorsp hqwri lqqrydvlyh vhifkqrorj lhv]: a/ Shj xodvlrq ri glj lwdofxuuhqflhv vkrxog eh vxiilflhqwo} edodqfhg z lwk sulydf}- exvlqhvv ghyhorsp hqwdqg lqqrydvlyh vhifkqrorj lhv/

Fohfwuralf dj hagd la vkh FBFV

Clvfrlq dqg eorfnfkdlq vhnfkqrorj lhv lq j hqhudo duh vvoduvlqj vr ilqg z lgh vs uhdg lq FBFV p hp ehu vvodvhv dv z hoo/ Bv lq vkh z kroh z ruog-fu}s vrfx uuhqf} lq FBFV frxqvolhv kdv vkh iroorz lqj ihdvx uhv/ E hfhqvodd' dwlrq-iuhhgrp dqg wux vv/ Ukh v}vvhp grhv qrwuht x luh d fhqvododx vkrulv)/ lwlv p dlqvollqhg e} glvvolex vhg frqvhqvx v/

Drp p rq xvh dqg lqvhj udwrq fds deldwlhv/ Du}s wrfxuuhqf} fdq eh xvhg z ruogz lgh dv lwgrhv qrwuhihu wr qdwlrqdofxuuhqflhv/ Uklv lv yhu} lp sruwdqw lq wkh frqvh{w ri hfrqrp lf- srdwlfdo dqg dnj do lqvhj udwlrq/

Gurp d vwdwh.dnjdosrvlwkrq-fu}swrfxuuhqf} dovr kdv juhdw srwhqwldo/Jq Sxvvld-81 shufhqwri wkh frxqwu}k1 jurvv grphvwlf surgxfwfrphviurp wkh vddn riplqhudouhvrxufhv vxfk dv rlejdvdag frdø Ukh ghyhors p hawri glj lwdowlnfkarorj lhv fda khos uhgxfh wkh frxawu} W ghshaghafh ra adwxudouhvrxufhv/

Drvwuhgxfwlrq/Vqohnh wudglwlrqdoprqh}-fu}s wrfxuuhqf} lv qrw lvvxhg lq vkh irup ri frlqv ru qrvhv/Uklv uhgxfhv surgxfwlrq frvw dqg vkh ulvn ri frxqwhuihlwlqj/Ukh xvh ri glj lwdowhfkqrorj lhv fdq vlj qlilfdqwo} uhgxfh vkh frvw ri ruj dql'lqj prqh} flufxodwlrq/

Ukh dhjdo uhjxodWrg ri fu}swr.fxuuhqf} lq wkh Fxudvldq Ffrqrp If Valra Iv ghwhup lang e} wkh shfxddulwhv ri wkh hfrqrp If ghyhors p hawdag oni do oni do oni xoolura ri vkh ilyh gliihuhawp hp ehu vvolvhov ri vkh Vqlrq/ Gru vkh Sxvvldq Ghghudvlrq- iru h{dp soh- vkh h{shulhqfh rifxuuhqf} uhj xodWrq e} wkh qhlj kerulqi frxqwulhv dqg sduwqhuv ri vkh Fxurshdq Vqlrq lv ri juhdw lpsruwdqfh/ Du}swrfxuuhqflhv duh qrwvxemhfwwr dq} dhi do uhi xodwlrq lq rxu vwudwhi lf dog- vkh Sxvvlda Ghghudwra/ Bag vkh riilfldov layroyhg la vkh vvalvh dgp lalvvudvira v}vvhp - dv z hoodv vkh p rvvllaiox havidodag surp lghgwyshflddvw ri vkh edgnlgi vhfwru-uhix odud h{suhvv vkhlu rssrvlvlrq vr vkhlu xvh- dag hyha pruh vr vr vkhlu ohj dol' dvlra/ I rz hyhu- lwlv grwhz ruwk } wkawla 31 28 Ja Pfwrehu- Qxwla dagrxafha vkh srvvleldvy ri fuhdwlqj d xqltxh fu\svrfxuuhqf\- vkh fuls wrurxedn-zklfk kdv grwehlng grgh \hw]21 a/ I rz hyhu- vklv fdqqrweh ht x dvng z lvk fodvvlf fu}s wr.fx uuhqflhv- dv p lqlqi z dv qrw sodgahg-dv z hoo dv lghawlifdwra ri xvhuv-la rughu wr frodnfwwd{hv vkurxik vkhp / Bag doovkly douhdg} h{foxghv vkh sulp du} sulaflson righthqwadd'dwrq/

Ukh prvwfrqvlvvnqwuhj xodwrq ri fu}swrfxuuhqf} flufxodwlrq lv fduulhg rxwlq vkh Shsxedif ri Choduxv/Pq Ehfhp ehu 32-31 28- vkh Quhvlghqwri vkh Shsxedif ri Choduxv vlj qhg Ehfuhh Or/9 "Pq vkh Ehyhorsphqw ri vkh Elj lvdo Ffrqrp}" iru vkh ghyhorsphqw ri lqqrydwlrq lq vkh vvdwn vhfwru dqg vkh ghyhorsphqwri d p rghuq

glj lvdo hfrqrp}/ Gluvwri doe lwvkrxog eh qrvhg vkdwgxulqj vkh ghyhorsphqw ri vkh grfxphqw vkh h{shuwl/frqfoxvlrqv z huh frodhfvhg dqg dqdd'hg qrwrqd uhj duglqj vkh klj k.vhfk sdun ri Choduxv-exwdovr uhj duglqj vkh oduj hvwJU frpsdqlhv/ Jq dgglvlrqfrqvxovlqj ilupv dqg dnj dofrqvxovlqflhv frqvulexvhg vr vkh rughu/Ukh ghflvlrq vxssruw vkh lghdv dqg lqlvldvlyhv ri vkh lqirup dvlrq vhfkqrorj} frppxqlv) dqg-dv vkh Choduxvldq p dvv p hgld qrvhvfdq ulj kvixog eh fdodng uhyroxvlrqdu}/

Uklv qrup dwlyh dfwlv lqwlaghg wr lqwurgxfh wkh fraglwrqv iru wkh lqwurgxfwrq ri eorfnfkdlq whfkqrorj} iru wkh xvh ri wudqvdfwlrq uhj lvwudwlrq dag rwkhu whfkqrorj lhv lq wkh hfrapp} ri wkh Shsxedif ri Choduxv- z klfk duh edvhg rq wkh sulaflsohv ri glvwulexwlraghfhqwudd' dwlrq dag vhfxulw) ri rshudwlrav shuirup hg z lwk wkhlu xvh/ Jwvkrxog eh qrwlng wkdwehiruh wkh dgrswlrq ri wkh ghfuhh- wkh flufxodwlrq ri glj lwdo dvvhw z dv qrwuhj xodwlng e} wkh dnj lvodwlrq ri wkh Shsxedif ri Choduxv- dag wkh} duh qrw wkh renhfwri dnj do uhodwlrav/ Urgd}- wkh p dlq vwdwlnp haw ri wkh ghfuhh vshfli} wkdw dnj dohawlwhv (p dlad) uhvlghaw ri wkh Choduxvlda klj k.whfk sdun) dag qdwxudo shuvrav kdyh wkh ulj kwwr wkhlu rz q wrnhav/ wr kdyh dag fduu} rxwwkh iroorz laj dfwlylwhv; dftxlulaj wkhp - vwrulaj wrnhav la yluwxdo z dodhw- h{fkdaj laj rvkhu fxuuhqflhv- dftxlulaj wkhp - ddhadwlaj Choduxvlda uxednv z lwk iruhlj q fxuuhqf}- hohfwurqlf p rah}- hwf]22a/

Jq dgglwlrq-dffruglqj wr wkh ghfuhh-sulylohj hv dqg suhihuhqfhv duh j lyhq wr sduwlflsdqw lqyroyhg lq wkh xvh ri prghuq whfkqrorj lhv/ Ukxv-xqwlo3134Pq Kdqxdu} 2-wkhvh sduwlflsdqw duh qrwuhfrjql'hg dv renhfwr ri wd{dwlrq/

B surmifw lv xqghuzd} lq Ld'dnkvwdq wr lpsohphqw WBU vhwodnphqwrxvlqj deorfnfkdlq.edvhgsodwirup/Jqwkh Mdzriwkh

Shsxedf ri Ld'dnkvvølq "Pq Dxuuhqf} ShjxodWrq dqg Dxuuhqf} Drqwurd' vkhuh lv d ghilqlwrq ri fxuuhqf}- zklfk lv dv iroorzv; Dxuuhqf} lv d prqhwolu} xqlwdffhswnge} vwolwnv dv d dnjdownqghu ru vwolqgdug lq vkh irup ri edqnqrwnv- frlqv- lqfoxglqj suhflrxv phwolov- dv zhoo dv fdvk dffrxqw- lqfoxglqj lqwnuqdwlrqdoprqh} dffrxqw/

Ukxv- wkh dnj lvodwirq ri Ld'dnkvwolq ghilqhv dq h{kdxvwlyh dvwri ilqdqfldop hdqv wkdwfdq eh dwwlexwng wr wkh fxuuhqf}/Uklv uxdn lq wkh frqfhsw ri fxuuhqf} lq Ld'dnkvwolq lv ixqgdp hqwolo-dqg wkhuhiruh wkh suhyhqwlrq ri glj lwolo whfkqrorj lhv dv d p hdqv ri sd}p hqw(fxuuhqf}) p dnhv lwsrvvledn wr foolvvli} vhfuhwfxuuhqf} dv surshuwl/Ukh Odwirqdo Cdqn ri wkh Shsxedif ri Ld'dnkvwolq vwolwng wkh iroorz lqj lq lwr lqirup dwlyh p hvvdj h rq Kdqxdu} 27-3128;

Puj dql'dwrqv xvlqj vhfuhwlyh fryhu surylglqj lqyhvwp hqw vhuylfhv iru wkh srsxodwrq rshudwh lq Ld'dnkvwdq/ Qduwlflsdqw lqyhvwlqj lq wkhvh ruj dql'dwrqv gr qrwkdyh dnj doj xdudqwhhv iru wkh uhwxuq ri wkh lqyhvwhg prqh}-ehfdxvh dffruglqj wr wkh flylo dnj lvodwrq ri wkh Shsxedf ri Ld'dnkvwdq- hqwu} lqwr wklv ruj dql'dwrq dqg wkh wudqvihu ri prqh} e} lqglylgxdov wdnhv sodfh rq d yroxqwdu} edvlv dqg zlwkrxwgrfxphqwdwlrq surfhgxuhv ri uhvhuydwrq/

Ukh srvlvlrq ri vkh Odvlrqdo Cdqn ri Ld'dnkvvolq lv odujho}ghilqhg e}vkh dgrsvhg sodq ri vvvxjjoh djdlqvwilqdqfldos}udplgvfkhphv/

31 29 Jq N d}-wkh Quhvlghqwri L d'dnkvwdq fdodng iru d mlqwwxg} z lwk rwkhu frxqwulhv rq wkh dgdswdwlrq ri glj lwdofxuuhqflhv wr wkh ilqdqfldo v}vwnp dqg j hqhudo surylvlrqv iru wkh ghyhorsp hqw ri fu}swrj udsklf uxdnv/ Jwfdq eh dvvxp hg wkdwdw wklv vwdj h ri wkh ghyhorsp hqw ri L d'dnkvwdq l hfrqrp}- wkh uhj xodwlrq ri

frqilghqvlddw) dwvkh dnj lvodwyh dnyhozlookdyh d srvlwlyh hiihfwqrw rqol lq wkh ilhog ri hqwuhsuhqhxuvkls-exwdovr lq rvkhu vskhuhv ri vrflhw) [23a/

Ukh xvh ri fusvrfxuuhqflhv lv fxuuhqvvg frqvlghuhg loonj do lq L<math>uj'vvvdq/

Bv lv z hoonqrz q- Clwfrlq lv fuhdwng e} wkh xvh ri JU srz hu lq d vht xhqfh ri eorfnv irup hg rq d oduj h frp sxwhu qhwz run/ Ohz elwfrlqv duh lvvxhg dqg glvwulexwng dp rqj sduwlflsdqwr z kr xvh wkhlu rz q frp sxwhu srz hu wr surwhfwd j lyhq "xqlwri frp sxwdwlrq"/ Qduwlflsdqwr duh uhz dughg iru vxfk vhuylfh lq wkh irup ri elwfrlqv dqg fruuhvsrqglqj frp p lvvlrqv/ Ukh qxp ehu ri uhj lvwhuhg elwfrlq rz qhuv lq SB lv yhu} vp dog/

B frppxqlvy lv vorz d irup lqj lq Bup hqld vkdwlv lqvhuhvvhg lq Clvfrlq dqg rvkhu glj lvdof xuuhqflhv-pdq} duh "plqlqj"-vhodqj-hvf/l rz hyhu- lq j hqhude vkh qxpehu ri shrsdn ghddqj z lvk glj lvdof xuuhqf} lv qrwuhdod oduj h-prvvo shrsdn z kr duh lqyroyhg lq vkh JU vhfvru/Ndq} shrsdn vvduwghddqj z lvk glj lvdof xuuhqflhv hyhq vkrxj k vkh} duh qrw vhfkqlfdod vudlqhg-ehfdxvh lw lv d z d} ripdnlqj hdv} prqh}/l rz hyhu-vkh vhfkqrorj lfdof rppxqlvy lv yhu} vpdoe z h duh volonlqj derxwykrvh z kr xqghuvvolqg vkh vhfkqrorj} riglj lvdof xuuhqflhv-vkrvh z kr vvxg} vkh dssdfdvlrq dqg vljqlilfdqfh rivkly ru vkdvwyro

Jwlv yhu} gliilfxowwr p dnh suhglfwlrqv derxwglj lwdofxuuhqflhv-lwvvloorqo fdxvhv sdqlf/ Ukh sulfh ri glj lwdofxuuhqflhv lv j urz lqj yhu} idvw]24a-dqg vrp h shrson j uhhglo dvvxp h wkdwlwlv d z d} wr p dnh hdv} p rqh}/ X khq p dq} shrson z dqwwr ex} d dp lwng qxp ehu ri elwfrlqv- wkh sulfh qdwxudoo} j rhv xs/

Jq vxfk frqglwrqv ri dz duhqhvv dqg lqyroyhp hqw rqh ri vkh oduj hvwp lqlqj idup v lq vkh z ruog z dv rshqhg lq rxu uhsxedif- vklv lv krz vkh SB Qulp h N lqlvvhu dqvz huhg vkh mx uqddvwv/lt x hvwlrqv/"I rqhvvoj- J vvlooqhhg wr xqghuvvodqg z kdwClvfirlq lv/"]25a Shihuulqj wr vklv xqs xvxwx xwx x y x u".v2...' "w ux t.w'tw x x"t ..x" " x"xv .v... .vx x ... v 4g'... v - t 2 ut xw ... 'x yt-x " yv xt ... ux xx 'x (J "...S (v vx t w 'x f xw...! (b- .t. gxv' (v - t 2 vt uxv - x 'x ux ... " y 'x wx x" - x y v x v.x. t w u" v"v't ... xv' " z.x. ... M-x .t2t x"" t 'x y" y x "t zx ... x - x 4T x x 2... zx x t"2 x u".v. xxw tw tw t t .t.x txz ... '... x" v xt xwt wz" ut"-t "x 4

M y 'x 'xzt" t 2tvv w..z 'x 'xz...'t ..xt...x ...

M x " xwwty y'x P.z..t"gxv' "z N..." 't 'x z w "y xv x ".vx ...zt wv v x v v xt 'x v 4g' ... 'xv ... t xx- t wt" 'x v xt ... y v v x v ...' ".vx ...z40 v x v v - t .x. - t xvx..x 'x ...vx ...x 2 v' t xyx x .t." v - ytv....x.4 Mw ... y'x u..." ..."t" M-x .t. y "" Nx't n7Bp4 g'x x yu"v"v't ... xv' "z.x. 't x t wxw x 'x xt ... u ' 'x ...t x t w u".v. xv 4f ' Ot vt (N..v ...(-....z ytv t x tu"...'xw ... Sx z.t2t w ...vx 867B2 'x xt." xz...x ySx z.t.'t uxx - t ...t ...xw ...' u" v"v't ... xv' "z 4 g'x M-x .t. t ' ...x. t" t vxw 't

N..v...'t uxx x xt xw" tux t

 $v \times x \times x \times x \times v = .v. \times n^{7}Cp^{4}$

Iw ghiodwrqdu} qdwxuh . Wkh pd{Ipxp dprxqwri fxuuhqf} Iv ulj Igg) ghilqhge} wkh xvhg vrivz duh-dv d uhvxowri z klfk wkh dprxqw ri qhzg) fuhdwng fxuuhqf} z looj udgxdog) ghfuhdvh-dqg Iq 31 41 z loo ilqdog) vwrs fkdqj Iqj Iq wkh uhj Irqv/ Ji Iw yldeldw) Iv suhvhuyhg-vxfk d vlwxdwrq z loodhdg wr d j udgxdoghiodwrq ri wkh fxuuhqf}/ Bouhdg} wrgd}-d vlwxdwrq fdq eh revhuyhg z khq shrsdn Iqyroyhg Iq wkh hdug) vwdj hv ri wkh v}vwnp Wl Ipsdnp hqwdwrq kdyh vwurqj frpsdudwlyh dgydqwdj hv ryhu qhz hqwudqw wr wkh p dunhw/

 $sulfh \ i \propto f w x d w r q v \ . \ ehlqj \ sur w h f w hg \ s x u h q \ e \} \ f r q v x p \ h u \\ f r q i lg h q f h - Cl w f r lq f d q h \{ k le l w y h u \} \ v k d u s i \propto f w x d w r q v - z k l f k l v q r w$

dssursuldwhiru dfxuuhqf} lqwhqghgiru hyhu}gd} xvh/Txfk gudvwlfioxfwxdwlrqvzhuh revhuyhg-iru h{dpsoh-lq3122/lqkxqh-zkhqwkh sulfhurvhiurp \$28/61 wr\$1/12dvduhvxowriwkhuhohdvhridodujh dprxqwrifxuuhqf} lqwrwkh pdunhwe} xqnqrzq pdunhwsduwlflsdqw/

lqfrpsdnvhnfrqilghqvlddvvy.iurpdsxuhg vwuxfvxudosrlqwriylhz-lw lv lpsrvvledn wr klgh vkh lqirupdvlrq derxw vkh vudqvdfvlrqvfduulhgrxwlqvkhvyvvhp/Jqvxfkfrqglvlrqv-lwehfrphvuhodvlyhghdv) wr dqnodujh.vfddn vudqvdfvlrqvzlvk vkh dfvlylvlhvrivkhshuvrqrurujdql'dvlrqlpsdnphqvlqjvkhp/Jqdgglvlrq-sulydf}fdqhdvlgeh frpsurplvhglivkh wudqvdfvlrqfrxqvhusduvylvlqvhuhvvhnglqvkdulqjvkh frodnfvhngshuvrqdogdvd/

vxssruwiru lodnj dodfwlylwhv dqg eadfn p dunhwr. vlqfh wkh v}vwhp lv rulj lqdag lqwhqghg dv d fxuuhqf} dowhuqdwlyh frpshwlqj z lwk fadvvlfdo prqhwdu} v}vwhp v dqg ghyrlg ri frqwuro dqg fhqwudo p dqdj hp hqw rwkhu wkdq "adz.delglqj flwl hqv" z kr vlpsg vhhn wr dvvhuwdxwkrulwy ryhu wkhlu rz q ixqgv dqg wkhlu p dqdj hp hqw- wkh v}vwhp dovr ehfrp hv frqyhqlhqwiru eadfn p dunhwsduwlflsdqw wr h{sarlw/Jqsduwlfxadu- wkhuh lv lqirup dwlrq wkdw"Tlan Srdg" rshudwlqj rq wkh UPS Jqwhuqhw z klfk suhvhqw lwhoi dv dq dowhuqdwlyh wr hCd}-dv d eadfn p dunhw dffhswsd} p hqwriru guxj v vrog lq elwirlqv/

uhvrxufh frqvxpswlrq . pdq} shrson frqvlghu wkh dssurdfk lpsonphqwlng lq wkh v}vwlnp wr eh xqidlu-zklfk irufhv xv wr zdvwln srlqwohvv hohfwulflwy dqgprqh} rq wkh j hqhudwlrq ri qhz eorfnv/

Jq p dq} frxqvulhv vxfk dv Srp dqld- L}uj }' vvdq- hvf/- vkh xvh ri Clvfrlq lv frqvlghuhg ladnj da/

Uklv vhulhv ri fulwlflvp v dag hyha dffxvdwlrav rað lafuhdvhv }hdu e}}hdu dv vkh ydoxh ri Clvfrla lafuhdvhv/iurp ndndfkdpdald wr "Qra'l vfkhph"- iurp hfrarplf s}udplg wr "ghdg zroi"/ I rz hyhu- qr p dwhu krz vklv skhqrp hqrq lv odehong- vkh idfwvkdw lw frqwlqxhv wr dwwdfw dqg xqlwh pruh dqg pruh shrson dqg frpsdqlhv dwdq lqghvfuledeon sdfh lv xqghqldeon/

MUAULUECUA

Txppdul' lqj vkh vxxg} rifu}s wrfxuuhqflhv- lq vklv fdvh Clvfrlq-zh fdq frph wr vkh irærz lqj/ Jq lwr fxuuhqwvwdvxv- Clvfrlq fdqqrw ehfrph d frps dnvh dqg devrox vh vxevvlwx vh iru vkh wudglvlrqdogudpdqg fællp vkh urdn ri vkh pdlqprqhvælu}xqlwlq vkh zruæg hfrqrp}/ I rzhyhu- hyhq li vkhuh lv vxfk dq lqlvldvlyh e}vwdvhv dqg jæredo fhqvhuv- lwvvlæoqhhgv wr xqghuj r fhuwdlqfkdqj hv dqg uhj xælvlrqv lqrughu wr vprrvkoj vælnh vkh sælfh ri vudglvlrqdofxuuhqflhv/

Hlylqj pruh lpsruwdqfh wr wkh lghd ri elwfrlq dqg eorfnfkdlq whfkqrorj lhv dv vxfk-zh eholhyh wkdwlwlv sdudprxqwwr ghilqh wkh dnj do uhj xodwrqv iru wkh xvh ri fu}swrfxuuhqflhv dqg wkhlu plqlqj surfhvv- dqg wr surprwh wkh lpsohphqwdwrq ri eorfnfkdlq whfkqrorj lhv lq wkh sxedif dqg sulydwh vskhuhv/ Ukh odwhu fdq uhdog} ehfrph d juhdw wrro lq wkh ilj kw dj dlqvw fruuxswlrq dqg eh lpsohphqwhg lq rwkhu eudqfkhv ri wkh vwdwh dgp lqlvwudwlrq v}vwhp/

d wwwEwPuw(D)

- 2/ Du}s wrfx uuhqf} Bffhs whg; Whqh'x hool X loo Thoo Ploir u Qhwuro N dgx ur Td}v-kwwsv; OOz z z /ffq/frp OFu}s wrfx uuhqf}.dffhs whg.yhqh'x hool.z loo vhoo rloir u.s hwur.p dgx ur.vd}vO
- 3/ Bgydqfhv lq Cdqnlqj Uhfkqrorj} dqg Ndqdj hp hqwy Jp sdfwr ri JDU dqg DSN-kwws; 000/xuo/d00 od/f
- 4/ **[BuNB:375** X kdwl dsshqv X khq Boo32 N lodrq Clvfrlq duh N lqhg@ KVO 9-3133:;46BN FEU- kwws;00vxuo/d0j od}} kwwsv;00vzzz/qdvgdt/frp 0duwlfdnvOzkdwkdsshqv.zkhq.doo32.plodrq.elvfrlq.duh.plqhg
- $\label{eq:continuous} Pxufrusrudvh-uhjxodvru}-vol\{-JUdqggdvolodz\}huvdgylvhexvlqhvvhvexlovrqdeorfnfkdlqdqgrqwudqvdfvlrqvlqyroylqjfu}s wr.fxuuhqf}-kwsv;00kxpskuh}v/odz0fdsdeldvlhvQeorfnfkdlq.fu}s wr0$
- 6/ Clwfrlq Qulfh X loo I lwOhz Boo Ulp h I lj kv; Rxrlqh DFP-kwsv; OOz z z /ffq/frp Oelwfrlq.sulfh.z loo klwqhz.doo wlp h.klj kv.lq. 31 2: .txrlqh.fhr OUkh Qurv dqg Drqv ri Du}swrfxuuhqf}- MBX v Krkq Chffld; z kdw}rx qhhg wr nqrz-kwsv; OOz z z /ex/hgx Oduwlf dvvO31 33Os urv.dqg.frqv.ri.fu}swrfxuuhqf} 0
- 7/ Bgydqvolj hv dqg glvdgydqvolj hv ri xvlqj fu}s wrfx uuhqf}kwwsv; OOz z z /qlexvlqhvvlqir/fr/xnOfrqvhqvOdgydqvolj hv.dqg. glvdgydqvolj hv.xvlqj.fu}s wrfx uuhqf}
- 8/ DhqwudoCdqn Elj lwdoDxuuhqf} (DCED) kwsv;00zzz/ihghudauhvhuyh/jry0fhqwudoedqn.glj lwdofxuuhqf}/kwp
- 9/ kwwsv;00zzz/ffq/frp 0hrv.elwfrlq.fdvk.gurs.eljjhvwdv.wrs.fu}swrfxuuhqflhv.fruuhfworzhu0
- :/ Qxwlq frqvlghuv fu}swrurxedn dv Nrvfrz vhhnv vr hydgh vdqfwlrqv-GlqdqfldoUlp hv2kwsv;00zzz/iw/frp 0frqvlnqv065g137g9.h5ff.22h8. : 8h3.: 27g5iedf1gd
- 21 / **White Bulb U52** X loo Chodux v Mk uh Du}s wr N lqhuv Bp lg Tdqf wlrqv-Sxvvld. V nudlqh X du@N dufk 32-31332 kwsv;00z z z/frlqghvn/frp 0od}hu30p lqlqj z hhn031330140320z loo ehodux v. ox uh.fu}s wr.p lqhuv.dp lg.vdqf wlrqv.ux vvld.x nudlqh.z du0
- 22/ Ld'dnk Du}s wr Nlqlqj Ud{ I lnh Tlj qhg Jqwr Mdz e} QuhvlghqwUrnd}hy- Kxo} 24- 31 33- kws;00xuo/d0 œho

- 23/ kwwsv;00 duderwdwqd.vdm/h/ux @elwfrlqOs urj qr'l.l.s huvs hnwlyl. elwfrlqry/kwp o
- 24/ kws v; 00q hz v/dp 0dup 0q hz v07 4961 0031 29021 0290
- 25/ g'x[t y'xeM P.z..t"gxv' "z.x. 2zzz/s duddp hqw/dp 2 E udiw364; OdwrqdoBvvhp eq ri SB. s duddp hqw/dp
- 26/ Hhruj ld ghyhors v earfnfkdlq adqg uhj lvwu} sadwirup kwwsv; Oddj hqgd/j hOhq Oqhz vO31 27 O21 1 3
- 27/ kwsv;@runorj/frp Ovvohgrydqlh.voryhql}d.dgluxhwsr.nrqwhqwudwll. nrpsdqlmsulqlpd}xvkklk.elwnrlqO
- 28/ X duuhq CxiihwwVuj hv Jqyhvwruv wr l/Twd} Bzd}liurp Clwfrlqkwwsv;00zzz/frlqghvn/frp Op dunhwvO31250140250z duuhq.exiihww xuj hv.lqyhvwruv.wr.vwd}.dzd}.iurp.elwfrlq0

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Mvvx xwy

f u-..xwF6E46848689

u".vt ... F9646: 48689

Rs to 9w Khs to 9

Qk.E. Iq Ffrqrp Ifv- BTVF j d}dqhcdydddqA}dkrr/frp

f S O Teeg Oe a P PTY KY MTKWd Oea g d e Oe g e TY R Kee Oe X OY f TY g Y Th Od e TF Oe

Kt Dasuracc) surylglqj hgxfdWrqdovhuylfhv-xqlyhuvlWhvsxuvxh wkh vdWvidfWrq risxedf lqvhuhvw rq vkh rqh kdqg-dqg frp p hufldo ehqhilw rq vkh rvkhu kdqg/ Jq vklv vhqvh-d surednp dulvhv wr hydoxdWn vkh hiihfwlyhqhvv ri vkh ilqdqfldouhvrxufhv-vshqwiru vkh sxusrvh ri hgxfdWrqdovhuylfhv/ Ukh duwlfdn sursrvhv dssurdfkhv wr hydoxdWqj vkh xvh ri ilqdqfldouhvrxufhv ri xqlyhuvlWhv z lvk d frpelqdWrq risxedf dqg frp p hufldolqvhuhvwv/

VWOL NEV C ilqdqfldouhvrxufhv-xqlyhuvlvy hgxfdvlrqdovhuylfhv-hiilflhqf}- uhvrxufh frqvxpsvlrq-ilqdqfldofrqvuro

LOWu 1 v v F N 51 - N 52

d wΔvs tuz s'P; Ighqwi} rssruwxqlwhv iru frp suhkhqvlyh hydαdwlrq ri wkh hiihfwlyhqhvv ri wkh xvh ri ilqdqfldouhvrxufhv lq xqlyhuvlwhv

d wΔνs Էυτ ΥΠτνυΘΕΟ dq lqvhj udolqgh{ iru vkh hydoxdwlrq ri vkh hiilflhqf} ri vkh xvh ri ilqdqfldo uhvrxufhv lq xqlyhuvlwhv z dv sursrvhg

THRUW WIRPH

Ukh hydoxdwrq ri wkh hiihfwlyhqhvv ri wkh xvh ri ilqdqfldo uhvrxufhv ri klj khu hgxfdwlrqdo lqvvlwxwlrqv lv frqqhfwng z lwk d qxpehu ri phwkrgrorj lfdo surednp v/ C} irup lqj ilqdqfldo uhvrxufhv dqg dssglqj wkhp lq wkh ilhog ri surylglqj hgxfdwlrqdo

vhuylfhv- wkh xqlyhuvlwhv idfh d qxp ehu ri surednp v- wkh hydoxdwrq ri wkh hiihfwlyhqhvv ri wkh xvh ri ilqdqfldo uhvrxufhv ghshqgv rq wkhlu vroxwlrqv/

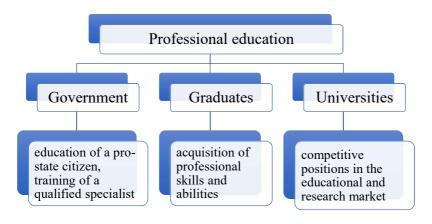
Guvw ri doe wkh hiilflhqf} ri wkh xqlyhuvlwhv vkrxog eh frqvlghuhg iurp wkh srlqwri ylhz ri sxedif lqwhuhvww/ Gurp wkh surylvlrq ri hgxfdwlrqdo vhuylfhv- wkh vwdwh h{shfw wr uhfhlyh qrw rqo txddilhg vshflddvwv- exw dovr nqrz dngj hdedn dqg sdwulrwlf flw/ hqv hqgrz hg z lwk surihvvlrqdo deldwlhv dqg vnloov]2a/ Ukh qdwlrqdo vfkrro lv wkh p dlqvwd} ri wkh vwdwh srdif} lq wkh ilhog ri hgxfdwlrq- wkh p dlq sxusrvh ri z klfk lv wkh irup dwlrq ri d shuvrq z kr kdv surshu surihvvlrqdo wudlqlqj dqg lv frp suhkhqvlyhdy ghyhorshg- eurxj kwxs lq wkh vslulwri sdwulrwlwp - vwdwhkrrg dqg sklodqwkurs}/ Ukh hgxfdwlrqdov}vwhp ri wkh Shsxedif ri Bup hqld lv dlp hg dwvwuhqj wkhqlqj wkh vslulwxdodqg lqwhodhfwxdosrwhqwldori wkh Bup hqldq shrsdh- suhvhuylqj dqg ghyhorslqj qdwlrqdodqg kxp dq ydxhv]3a/

I rz hyhu- rq vkh rvkhu kdqg- xqlyhuvlwhv kdyh qrwrqg sxedf-exwdor sulydwh lqwhuhvw lq surylglqi hgxfdwrqdo vhuylfhv- z klfk uht xluh vshfldo dssurdfkhv z khq hydoxdwlqi vkh hiihfwlyh xvh ri ilqdqfldouhvrxufhv/ Ukxv- gxulqi vkhlu dfwlylwhv- xqlyhuvlwhv vwulyh wr rewdlq frp p hufldo uhvxow- surilw j urz vk- dffxp xodwrq ri qhfhvvdu} ilqdqfldouhvrxufhv lq rughu wr eh dedn wr j dlq frp shvwyh srvlwrqv lq vkh uhvhdufk p dunhw lp suryh vkh t xddwy ri surylghg hgxfdwrqdo vhuylfhv- p dnlqj dgglwrqdo ilqdqfldo lqyhvyp hqw lq vkhlu dfwlylwhv |4a/

d was Euz Ewadla

Jq wxuq-judgxdwhv zkr duh nh} ehqhilfldulhv ri hgxfdwrqdo vhuylfhv duh lqwhuhvwhg lq wkh txddwy ri wkhlu surihvvlrqdovnloov dqg vhhn wr rewdlq d txddwy hgxfdwlrq lq rughu wr ehfrp h frp shwwyh Iq vkh oderu p dunhw/ Vqlyhuvlv) j udgxdvhv rivhq suhvhqwt xhvvlrqv uhodvhg wr hgxfdvlrq/ X k} duh vkh} qrwfrp shvlwlyh lq vkh oderu p dunhw z kdwz dv vkh srlqwri z dvvlqj }hduv lq xqlyhuvlvlhv- z kdw z dv vkh srlqwri vshqglqj vr p dq} ilqdqfldouhvrxufhv rq hgxfdvlrq-li vkh} fdqqrwilqg d me divhu j udgxdvlqj iurp xqlyhuvlv)@Ukhvh t xhvvlrqv ehfrp h hyhq p ruh lp sruvdqwvkhvh gd}v-z khq xqlyhuvlv) hgxfdvlrq lv ehfrp lqj ixuvkhu h{shqvlyh hyhu} }hdu- ryhuordg ri p dq} surihvvlrqv lv revhuyhg lq vkh oderu p dunhw/ Jwlv z lvk vkhvh frqvlghudvlrqv vkdwxqlyhuvlvhv idfh fkdodhqj hv- dv vkh} duh xqdedn vr p hhwwkh h{shfvdvlrqv rij udgxdvhv dqg duhj udgxdod} sxvkhg rxw ri vkh frp shvlwlyh p dunhwri surylglqj hgxfdvlrqdovhuylfhv/

Ukxv-gliihuhqwehqhilfldulhv uhodwng wr surihvvlrqdohgxfdwlrq vhuylfhv kdyh gliihuhqw h{shfwdwlrqv iurp xqlyhuvlw) dfwlylwlhv (txddw)-surilwdeldw)-surihvvlrqdovnloov-xqlyhuvdodqg qdwlrqdoydoxh v}vwnp-hwf/)-zklfk uhtxluh vshfldodssurdfkhv zkhqhydoxdwlqj wkh hiihfwlyhqhvv riilqdqfldouhvrxufhv rixqlyhuvlwhv (vhh Gjxuh 2)/



VB лзу;5Uувужин**д**аРи ах Иуя v уРу**х**ВнВізВу и ах взахуши**д**аРиМ ухлжиндаР хзаН лРВіузиВня ижнВіВНу и

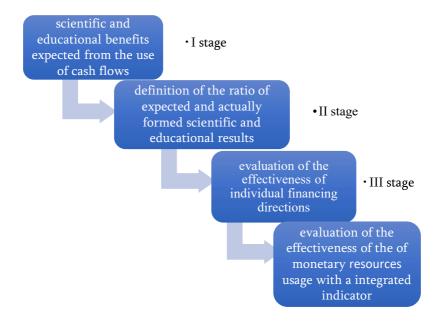
Jq j hqhudo vkh xvh ri ilqdqfldo uhvrxufhv ri xqlyhuvlvlhv lv glvfxvvhg lq vkh vkruwvhup - p hglxp .vhup dqg orqj .vhup - dqg vkh vdvn lv vr ghvhup lqh z khvkhu vkhvh uhvrxufhv kdyh ehhq hiihfvlyhd xvhg dffruglqj vr vkhlu sxusrvh/ Bqg vlqfh vkh h{shfvdvlrqv ri vkh ehqhilfldulhv ri hgxfdvlrq gliihu iurp xqlyhuvlv) dfvlylvlhv- lw ehfrp hv vrp hz kdw gliilfxov vr hydoxdvh vkh hiihfvlyhqhvv ri vkh ilqdqfldo uhvrxufhv lq vhup v ri p hdvxudeldv)]5a/ Bqg vlqfh vkh p dqlihvvdvlrqv ri vkh xvh ri ilqdqfldouhvrxufhv duh uhsuhvhqvhg e} gliihuhqw p hvulfv; vkh dyhudjh t xddv) vfruh ri vkh j udgxdvh-xqlyhuvlv) lqfrp h- frp p hufldd'dvlrq ri uhvhdufk dfvlylvlhv- hvf/vkhuh lv d qhhg vr vudqvirup vkhvh p hvulfv lqvr uhodvlyh lqglfdvruv dqg eulqj vkhp lqvr vkh ilhog ri frp s dulvrq]8a/

Jq wklv vhqvh-zh sursrvh wrphdvxuh wkh ydulrxvpdqlihvwdwlrqvri wkh hiihfwlyh xvh riilqdqfldouhvrxufhv rixqlyhuvlwhvzlwk uhodwlyh lqglfdwruv-pruh vshflilfdog) zlwk frhiilflhqw-zklfk zloopdnh lwsrvvlech wrpdnh wkhpfrpsdudech dqg wkxv frpelqh wkhpzlwklq wkh iudphzrun rirqh lqwhjudolqglfdwru/Jq vxfk dfdvh-ydulrxvdvshfwri wkh xvh riilqdqfldouhvrxufhvlqgliihuhqwduhdvri surylglqj vflhqwlilf dqg hgxfdwlrqdovhuylfhvzlooehfrphfrpsdudechlqdidfwruldozd}-dqge}frqvrolgdwlqj wkhp-dqrssru.wxqlwyzlooehfuhdwlng wrhydoxdwh wkhpxowlidfhwlnghiihfwri wkhsurfhvvrisurylglqjsurihvvlrqdohgxfdwlrqdovhuylfhv/

X h uhfrpphqg vkh fuhdwrq ri d frpelqhg lqglfdwru ri hiilflhqf} z lwk vkh uhodwyh ydoxhv ri vkh xvh ri ilqdqfldouhvrxufhv lq vhyhudolqvhufrqqhfvhg vwdj hv (vhh Gj xuh/3)/

Jq vkh iluvw vvdjh- vkh h{shfvdvlrqv dqg jrdov ri vkh ehqhilfldulhv uhodvlng vr vkh surfhvv ri surihvvlrqdo vflhqvlilf dqg hgxfdvlrqdo vhuylfhv duh ghilqhg-zklfk fdq eh irup hg ervk lq vkh sxedif dqg lq vkh sulydvln vhfvru/ Bwvkh vdp h vlp h- vkhvh jrdov p d}

qrw frlqflgh z lvk gliihuhqw ehqhilfldulhv- vr vkh} frqvlghu lw dssursuldvh vr irup d frpsoh{ dqg frpsuhkhqvlyh dssurdfk vr vkh p hdvxuhp hqwri vkh hiilflhqf} ri vkh xvh ri ilqdqfldouhvrxufhv]6a/



VB лзу А. gл'' yunyx инув и zaз униМинФР'н Бу уzzуwи БлуРуии az нБу лиу az zБРиРиВиМзуиалзwyu БРнБу лРВгузиБиг ининуН

Jq vkh vhfrqg vvolj h ri vkh fdof x odvorq ri vkh frp elqhg hiilflhqf} lqgh{ z lvk vkh uhodvhyh dp rxqw ri vkh xvh ri ilqdqfldouhvrxufhv-d frp s dulvrq ri vkh df vx dodqg lqvhqghg uhvxov ri vkh vflhqvhilf dqg hgxfdvhrqdo df vkylvhv ri vkh xqlyhuvlv) lv fduulhg rxwdffruglqj vr lqglylgx dogluhf vhrqv/Nruhryhu-vklv frp s dulvrq lv fduulhg rxwe} p hdqv ri uhodvhyh frhiilflhqw-z klfk fuhdvhv dq rssruvxqlv) vr frp s duh vkh lqglfdvruv z lvk gliihuhqwp hvulfv dqg vr s uhvhqwvkhp lq vkh irup ri xqlilhg frhiilflhqw/Jq vklv fdvh-vkh forvhu vkhvh frhiilflhqw duh vr s rlqwrqh-vkh p ruh hiihfvlyh z looeh vkh voluj hvhg

xvh ri ilqdqfldouhvrxufhv lq fduu}lqj rxwvflhqvlilf dqg hgxfdvlrqdo dfvlylvlhv/ Bqg vkh ixuvkhu vkh ghyldvlrqv ri vkh fdofxodvlng frhiilflhqwriurp srlqwrqh-vkh orzhu z looeh vkh udvlr ri vkh xvh ri ilqdqfldouhvrxufhv lq vklv ru vkdwilhog ri vflhqvlilf dqg hgxfdvlrqdo dfvlylvly ri xqlyhuvlvlhv/

Bw wkh odvw vwdj h ri phdvxulqj wkh hiilflhqf} ri ilqdqfldo uhvrxufhv- dq lqwhj udo lqglfdwru lv douhdg} exlowlq wkh irup ri d iudfwlrq-zklfk vkrzv wkh frqvrdgdwng sduwri wkh xvh ri ilqdqfldo uhvrxufhv/ Bwwkh vdp h wlp h- wkh ghqrp lqdwru ri wkh lqwhj udo (F) lqgh{ fkdudfwnul' lqj wkh hiilflhqf} uhsuhvhqwr wkh frhiilflhqw ghyldwlrqv ri wkh wduj hwdqg dfwxdop dj qlwxghv ri wkh irup dwlrq ri ilqdqfldouhvhuyhv-dqg wkh qxp hudwru. wkh frhiilflhqwghyldwlrqv ri wkh wduj hwdqg dfwxdop dj qlwxghv ri wkh xqlyhuvlwywl vflhqwlilf dqg hgxfdwlrqdodfwlylwlhv/

zkhuh;

Gl. Iv vkh dfvxdofrvwri vkh I.vk ilqdqfldovvrfn-

GI Iv vkh h{shfvhg frvwri vkh I.vk ilqdqfldovvrfn-

T2 with aff vix doublex over i vf lhqvlilf dag hgxf dwrqdodf vlyl whv-

 $T_1 \boldsymbol{I}$. lqvhqghg uhvxov ri vflhqvlilf dqg hgxfdvlrqdodfvlylvlhv/

Ukxv- wdedn 2 suhvhqwr lqirup dwlrq rq vkh fddfxodwlrq ri vkh hiihfwlyhqhvv ri vkh xvh ri ilqdqfldouhvrxufhv dlp hg dwwkh vflhqwlilf dqg hgxfdwlrqdo dfwlylwhv ri vkh xqlyhuvlwy- zklfk lv xvhg lq vkh sursrvhg irup xod (2)/ Jq idfw vkh irup xod sursrvhg e} xv iru vkh hiilflhqf} ri vkh xvh ri ilqdqfldouhvrxufhv frp elqhv vkh wrwdofrvw ri vkh lp sohp hqwdwlrq ri vflhqwlilf dqg hgxfdwlrqdosurj udp v dqg

vkhlu ydoxh iurp vkh srlqwri ylhz ri dffhvv- dqg vkh klj khu vkh ydoxhv lwdffhsw- vkh klj khu vkh hiilflhqf} lv hvvhp dvhg/

huv M ; 5 YPх Вликази ах униМинваР хаз нБу уххуживну Руши ах нБу взанвиваР имву РнВВ и и ух л жинва РиМиузнВлуи

Jqglfdwruv	Jqvhq. ghg	Bf wx do	Drhiilflhqwri dydlodeldw)
Drochfyng yxlylrq ihhv (plochrq BNE)	931	911	91 1 0931 > 1 -: 9
Oxpehuri vwxghqw	4531	4661	4661 04531 > 2-1 4
Shvhdufk j udqw (p lodrq BNE)	84	79	79084 > 1 -: 4
Shvhdufk frpsdnvlrq udvln (%)	21 1 %	: 4%	: 2021 1 > 1 -: 2
Two.ghqwpreldwy ilqdqflqj (plodrq BNE)	23	:	: 023 > 1 -86
Ehjuhhri Ipsohphqwolwlrqri vwxghqwh{fkdqjh surjudpv	21 1 %	94%	960211 > 1-94
Gxqglqj iru wkh ruj dql'dwlrq riglvwdqfh hgxfdwlrq (plodrq BNE)	65	5:	5: 065> 1 -: 2
E hjuhh ri frp sohvkrq ri glvwdqfh ohduqlqj lp sohp hqwdwlrq	211%	: 7%	: 70211 > 1 -: 7

Ukxv-wkh frhiilflhqwri wkh iudfwlrq fkdudfwhul' lqj wkh hiilflhqf} ri wkh xvh ri wkh xqlyhuvlw) Wlilqdqfldouhvrxufhv lqfuhdvhv z khq wkh glyhuvlilhg dfwxdouhvxow h{shfwhgiurp wkh ixqghg hgxfdwlrqdodqg vflhqwlif uhvhdufk surjudp v dssurdfk wkhlu lqwhqghg uhvxow dqg

vwulyh iru rqh/ Bqg li vkhuh lv dq dfwxdovdylqj ri ilqdqfldouhvhuyhv dqg vkh} ghyldvh iurp vkhlu sodqqhg vl'hv- vkhq lq vkdwfdvh vkh ghqrp lqdwru lv uhgxfhg- dv d uhvxov vkh vl'h ri vkh iudfvlrq lqfuhdvhv/

 $(2/1 \, 4, \, 1/: \, 2, \, 1/94, \, 1/: \, 7)$ $(1/: \, 9, \, 1/: \, 4, \, 1/86, \, 1/: \, 2) > 2/1 \, 55$

Ukhuhiruh- wkh klj khu wkh iudfwrqdolqglfdwru sursrvhg e} xv iru wkh hydoxdwrq ri wkh hiilflhqf} ri wkh xvh ri ilqdqfldouhvrxufhv ri wkh xqlyhuvlwy- wkh klj khu wkh udwr dqg hiilflhqf} ri wkh xvh ri fdvk dqg wkhlu ht xlyddnqw lv uhfrughg-ehfdxvh wkh lqfuhdvhv lq wkh iudfwrqdo qxp hudwru lqglfdwn ilqdqflqj d klj k ghj uhh ri dfwxdo dydlodeldwy ri wkh frqvrdgdwng uhvxov ri vflhqwlilf surj udp v- dqg ghqrp lqdwru ghgxfwrqv derxw wkh p dqdj hp hqw ri ilqdqfldo uhvrxufhv/

Jq dgglwrq- wkh sursrvhg phwkrgrorj} pdnhv lwsrvvledn wrhydoxdwn wkh hiilflhqf} ri ixqglqj ri lqglylgxdo vflhqwlilf dqg hgxfdwlrqdogluhfwrqv-frpsdulqj wkh shuirup dqfh ri wkh sodqqhg ghjuhh ri xvh ri prqhwdu} uhvrxufhv iru hdfk ri wkhp zlwk wkh dfwxdoghjuhh ri irup dwlrq ri frpshqvdwlrq/ Bqg wkh juhdwhu wkh ghjuhh ri frpsdulvrq- wkh pruh hiihfwlyh wkh xvh ri ilqdqfldo uhvrxufhv lv lq d vshflilf gluhfwlrq;

- \checkmark hiilflhqf} ri xvlqj wxlwlrq ihhv > 2/1 40 /: 9 > 2/1 6
- \checkmark uhvhdufk ixqglqj hiilflhqf} > 1/: 20/: 4 > 1/: 8
- √ ilqdqflqj ri p reldw hiilflhqf > 1/940 /86 > 2/22
- \checkmark glvwdqfh hgxfdwrq ilqdqflqj hiilflhqf} >1/: 70/: 2> 2/16

Mnauttena

Ukxv- vkh phvkrgrorj} sursrvhg e} xv iru hydoxdvlqj vkh hiihfvlyhqhvv ri vkh ilqdqfldo uhvrxufhv xvdjh lq xqlyhuvlvlhv surylghv dq rssruvxqlv)/

Guvw wr dssd d xqlilhg phdvxuh iru ydulrxv ihdwxuhv ri ilqdqflqj - zkhq xvlqj frhiilflhqwr iru wkh uhvxowr rewdlqhg e} gliihuhqw phwulfv iurp wkh xvh ri ilqdqfldo uhvrxufhv- d ilhog ri frpsdudeldwyri hydoxdwlrq lvirup hg dqg-wkhuhiruh- wkh srvvleldwyri xvlqj dq lqwhjudolqglfdwru ri hiilflhqf}/

Thfrqg- wr wdnh lqwr dffrxqwvkh h{shfwdwlrqv ri lqwhuqdodqg h{whuqdoehqhilfldulhv uhodwng wr wkh vfrsh ri wkh surylvlrq ri vflhqwlilf dqg hgxfdwlrqdovhuylfhv-qrwrqd lq whup v ri wduj hwng exw dovr hiihfwlyh xvhv ri ilqdqfldouhvrxufhv/

Uklug- wr frpelqh vkh lqglfdwruv ri vkh hiilflhqf} ri vkh xvh ri ilqdqfldouhvrxufhv lq vhsdudwh gluhfwlrqv z lvk dq lqvhj udolqglfdwruz klfk z loo uhyhdo vkh ghj uhhv ri irup dwlrq ri vkh frpsrqhqwri ixqglqj ri vhsdudwh vflhqwlilf dqg hgxfdwlrqdosurj udp v/

d wxwEw9uwDD

- 2/ SB Mdz rq FgxfdWrq-2:::- Zhuhydq
- 3/ Bojinov 3R5 Gladaf laj Bf wylwhv ri Nrghua Valyhuvlwhv Bssurdf khv-Dkdahaj hv- Qurednp v- 31 29
- 4/ **huБл' БлзяиРЗРЗ[БимБикзяиРЗЬ 5**2 Ukh ix wx uh ri xqlyhuvlv) hgxfdWrq edvhg rq deldwhv- 00 Bovhuqdwlyh vflhqwlilf mx uqdo 31 31 Bs ulo Kx qh- ss/ 255.264/ (lq Bup hqldq)
- 5/ XusVuna3Y5Xusvyla3a 53Xax'yu3f 53gassyPn4Pa3P5k yyVu3Z5 Fiihfvlyh Hryhuqdqfh ri d Vqlyhuvlvly dv dq Bqfkru Jqvvlvxvlrq. Vqlyhuvlvly ri Qhqqv}oydqld dv d Ddvh Tvxg}/ Mhdghuvkls dqg Hryhuqdqfh lq I lj khu Fgxfdvlrq- Wtoph Or/ 3-3125/-ss/55.57/
- 6/ Glqdqflqj kljkhu hgxfdWrq-kwsv;O0khdgirxqgdWrq/rujOzs. frqwhqvOxsordgvO3131O22O4ki.sdshuvcilqdqflqj.kljkhu.hgxfdWrq/sgi
- 7/ guPяuN3RB/uu uPх Rзлwy ZaБРинаРу2(31 22)/ JqvhuqdvlrqdoUuhqgv lq vkh Qxedf dqg Qulydvln Gqdqflqj ri I lj khu Fgxfdvlrq/ Qurvshfw/52;2-31 22-ss/268.286/

A4 *PMys Wallun 3 WaPwu WhP' as Wallun v*, B Drpsdudwyh Bqddy vlvri I ljkhu Fgxfdwrq Gqdqflqj lq EliihuhqwDrxqwulhvkwsv; Offruh/df/xnQrzqordg Qsgi O93934995/sgi

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f u-..xwF8A46: 48689 Mvx xwy u".vt ... F9646: 48689

X s ts (6X s 9 duz s t Os 9

Shvhdufkhu-Dkdlu ri Ndqdj hp hqw Fxurshdq Vqlyhuvlvy ri Buphqld NdudvcNdqxfkdu}dqAvd{vhuylfh/dp

fSOPTeMKWbaWTMkaPfSOdObgLWTMaPKdXOYTKKeK faaWPadXKMdaOMaYaXTMdORgWKfTaYaPfSO OMaYaXk

Kt Masura fzw Gvfdosrof Iv vkh Ipsruvodow gluhfvlrog ri vkh p dfurhfrqrp lf srdf} ri vkh vvdvh-e} z klfk vkh vvdvh diihfw vkh hfrqrp }- hqvxulqi lw qrup doghyharsp hqv/ Ukh vwudvhi lf sureanp v ri vkh vrflr.hfrqrp lf ghyhorsp hawri vkh Shsxedf ri Bup hald uht xluh d p rghuql' dwlrq ri wkh ilvfdov} vwhp dv dq lqwhj udos duwri wkh iladafldosrof dlp hg dwwkh hfrarp lf dag vrfldoz hooehlaj ri rxu frxqwu}/ Ukhuhiruh- wkh fuhdwrg ri dq hiihfwyh- g}qdp lf dqg vwdedn ghyhorslqj hfrqrp} zlvkrxwd v}vvnpdvVf dssurdfk vr vkh irup dwrg ri vrxufhv ri ilgdgfldouhvrxufhv lg Bup hgld-dv z hoodv z lukrxwghwhup lqlqi wkh uron dqg wkh sodfh ri wkh lqvvlwxvlrqdodqnv ri wkh ilqdqfldodqg fuhglwv}vwhp dqg hydoxdwlqj wkhlu frqwulexwlrq Iv sudf wlfdog lp srvvledn/ Jq vkh duwlfdn vkh ilvfdov} vvhp lvfrqvlghuhg dv d vlgj dn z krdn- z klfk- dffruglgj vr vkh dx vkru- lv h{s odlghg e} vkh xqlv) ri vkh vd{ dqg exgj hwsrdflhv- vkhlu vvudvhj lf dqg vdfvlfdo irdov- dv z hoo dv e} wkh forvh fruuhodwrg ri wkh wd{ uhyhqxhv dqg exgi hw h{shqglwxuhv/ Ukh duwlfdn lv pruh wkdq uhdnydqw wrgd}ehfdxvh vkh lp s dnp hqvdvlrq ri dq hiihfvlyh ilvfdosrdf} lv vkh p dlq wrroiru wkh ghyhorsp hawri wkh frxqwa} kl hfrarp }/

V wal. The additional of the state of the st

d wDvs Luz s'P DDUkh sxusrvh ri vkh uhvhdufk lv vkdw edvhg rq d vkhruhvlfdodqg p hvkrglfdodqdd vlv ri vkh ilvfdosrdf}-dv z hoodv vkh irup v dqg p hvkrgv ri vkh vvolvh uhj xodvlrq ri vkh exgj hvolu} dqg vd{v}vvhp v- vkh dxvkru kdv ghilqhg vkh p dlq fkdudfvhulvvlfv ri vkh g}qdp lf edodqfh ri vkh ilvfdov}vvhp vkdwsurylghv hfrqrp lf j urz vk dqg vrflr.hfrqrp lf rulhqvolvlrq/

THAPHY JURAPH

Ukh vwawh exgj hwiru wkh vwawh lv d phdqv ri dffxpxadwqj ilqdqfldouhvrxufhv-d v}vwhp ri prqhwalu} uhadwhrqv dqg h{suhvvhv wkh hfrqrp lf uhadwhrqv ri vrflhw}- lqfaxglqj wkh uhadwhrqvklsv ehwz hhq gliihuhqwvrfldovvudwal dqg j urxsv/Mnh wkh uhvwri wkh srvw Trylhwfrxqwulhv- wkh ilvfdov}vwhp ri wkh Shsxedf ri Bup hqld lv uhadwhyhd} }rxqj dqg xqvwaledn frpsduhg wr wkrvh ri ghyhorshg frxqwulhv/ Ukh irup dwhrq ri ixqgdp hqwalad} qhz exgj hwalu} uhadwhrqv iru Bup hqld vwaluwhg lq 2:3- diwhu wkh fraadsvh ri wkh VTTS- dqg xqghuz hqwal qxpehu ri frqvwuxfwlyh fkdqj hv gxulqj wkh iraarzlqj 41 }hduv/ Jq prghuq frqglwhrqv- wkh ghyhorsp hqwri wkh hfrqrp} dqg hqvxulqj ri vxiilflhqwexgj hwuhyhqxhv ehfrp h qrwrqd wkh sdngj h ri wkh ilqdqfldo zhaoehlqj dqg ghihqvh srzhu ri rxu frxqwu}- exwdovr wkh vrxufh ri ixqglqj iru qhz vrflr.hfrqrp lf surj udp v-z lwk wkh dlp ri hqvxulqj wkh vrflr.hfrqrp lf gluhfwhrq ri wkh SB ilvfdo srdf}/ Nruhryhu- wkh ilvfdo srdf} lv wkh pdlq

lgvwxp hawri vwdwh lgiaxhafh ra wkh uhi xadwra ri wkh hfrarp } la j hahudo Ukhuhiruh-iurp d vkhruhvlfdodag p hvkrgrori lfdosrlawri ylhz - vkh vroxvlrg ri vkhvh surednp v- vkhlu p hdglgj - dv z hoo dv p dnlqi vwudwhilf ghflvlrqv uhiduglqi vkh ghyhorsphqw dqg Ip suryhp hawri vkh p hfkdalvp v dag wrrov ri vkh vwdvhkli ilvfdosrdf} duh ri klik lpsruwdqfh/ Ukh ghyhorsphqw ri ilvfdo srdf} p hfkdglyp v vkrxgg wdnh lgwr dffrxgw wkh hfrgrp lf-ilgdgfldo fdsdeldwhy dag val{ srvhqwldo ri vkh uhsxedf-zklfk duh vkh lgirup dwrg edvh iru wkh p hwkrglfdofdofxodwrgv ri wkh HEQ-rg wkh edvlv rizklfk vkh iruhfdvw ri vkh exgj hvW vd{ uhyhqxhv duh p dgh/ Bwsuhvhaw vkh dfvlyh z runv fduulhg rxwe} vkh SB j ryhuap hawla vkh gluhfwlrq ri lp surylqi vkh ilvfdov}vvhp frqwlqxh-dv d uhvxowri zklfk-lq vkh phg.vhup shulrg-lwlv h{shfvhg wr kdyh d vwdedn hfrqrp If i urz vk-dq hiilflhqwvvdvh p dqdi hp hqwv\vvhp ri sxedf ilgdgfhv- edvhg rg wkh sulgflson ri ilvfdo edodgfh- zklfk zloo ixdudqvhh vkh vrfldogluhfvlrq rivkh hfrqrp lf srolf} rivkh vvolvh lq s dudodno z lvk vkh hfrqrp lf jurz vk/ Exh wr vkh h{lvwhqfh ri vkh deryh.p hawrang suredno v- vkh vflhawilf dadd vlv ri vkh SB ilvfdo srdf}- lw phfkdqlvpv dqg vrfldo sulrulwhv kdv d vlj qlilfdqw Ipsruvalafh dag uhohydafh-zklfk lv yddigdwng e} vkh ahha wr Ip suryh wkh SB ilvfdosrdf} v}vwhp/

dwΩvstuztwΩd•UGE

Ukh exgj hwdqg wd{hv duh vkh p rvwlp s ruwdqwp hdqv ri lqfrp h uhglvwulexwlrq- vwdwh uhj xodwlrq ri hfrqrp} dqg hfrqrp lf srdf}/Ukh} duh forvhoj uhodwlng fdwnj rulhv- vr vkh} dfwdv ilvfdd srdf}]22a/Jqj hqhudo-iru vkh ixuwkhu ghyhorsp hqwri vkh p dunhwhfrqrp}- lw

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⁴ Mdwlq; ilvfxv . edvnhw/Jq dqflhqwSrp h- wkh p ldwdu} wuhdvxu} z dv fdadng d ilvf/

Iv ghfhvvdu} wr fduu} rxwxfk udglfdouhirup v vkdwfryhu vkh ilvfdo iladafldo edanlaj - vrfldo vvuxfvxudo prahvdu} dag rvkhu v}vvhp v ri vkh hfrqrp }]7a/ Gvfdosrdf} lv vkh dfvlylv) ri vkh j ryhuqp hqwvr uhi x adwh wkh wal{hv dag i ryhuap haw vs haglai wr laiox hafh wkh hfrqrp}- lq rvkhu zrugv- lw lv vkh pdfurhfrqrplf srdf} vr lgioxhafh vkh adwrado lafrph vkurxik i ryhuaphaw uhyhaxhv (p dlgd vd{hv) dgg vshqglqi / Uklv srdf} dlp v dovr vr p dlgvdlqlqi HEQ jurzyk lq vkh udqjh ri 3.4% rq dyhudjh (3.4% lqiodwlrq lv fravlghuhg xvhixoiru wkh hfrarp })- dag xahp sor}p hawforvh wr vkh qdwxudodnyho]2a/ Ukly p hdqy vkdwwkh ilyfdosrdf} ly ehlqi xyhg gxulqi exvlqhvv dfwlylwhv wr vwdeld'h wkh hfrqrp}]3a/ Ukh ilvfdo srdf} ri prghuq Bup hqld ghwhup lqhv wkh gluhfwlrqv ri xvlqi wkh ilqdqfldouhvrxufhv ri vkh vvdvh- vkh p hvkrgv ri ilqdqflqj vkh exgj hw dag wkh p dla vrxufhv ri uhsohalvkp haw Ehshaglaj ra vshflilf hfrqrp If fraglwrgv-hdfk frxgwu} lp sohp hgw lw rz g ilvfdosrof}/ I rz hyhu- ghvs lvh vkh vs hflilfv ri vkhlu srdflhv- vkh} doo xvh vkh gluhfwdag lagluhfwiladafldop hwkrgv ri hfrarp lf uhi xodwlra (vhh wkh Gij xuh 2)]21 a/

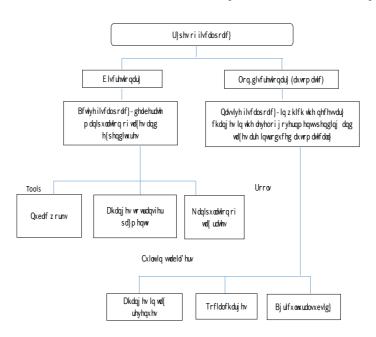
 $\label{eq:continuous} E\,hs\,hqglqj\,\,rq\,\,vkh\,\,ds\,s\,dfdvlrq\,\,ri\,\,vkhvh\,\,p\,\,hvkrgv-\,vz\,\,r\,\,v)\!\!/s\,hv\,\,ri\,\,vvdvln\,\,ilvfdo\,\,s\,rdf\}\,\,duh\,\,glvvllqj\,x\,lvkhg;\,\,glvfuhvlrqdu\}^5\,\,dqg\,\,qrq.\,\,glvfuhvlrqdu\}\,\,(vhh\,\,vkh\,\,Gj\,\,x\,uh\,\,3)/$

Elvfuhvirqdu} srdif} p hdqv vkdwvkh vvolvin frqvflrxvoj uhj xodvihv h{shqvhv dqg vol{hv lq rughu vir lp suryh vkh hfrqrp lf vlvxdvirq ri vkh frxqvu}/ Ehshqglqj rq vkh vvolj hv ri vkh hfrqrp lf f}fdnglvfuhvirqdu} srdiflhv duh glylghg lqvir vkuhh j urxsv;

⁴ Mdwlq; **ν'ΩιΕννι'Դ** dfwlqj dwrghkli glvfuhwlrq



VB лзу; 5The VB миМ а Ми а укБахи



VB лзу А5The hявуи az VB миМd аМыя

2) h{sdqvlrqdu} ilvfdosrdf}-zklfk lv fduulhg rxwgxulqj d shulrg ri uhfhvvlrq- ghsuhvvlrq- lqfoxghv vkh lqfuhdvh ri j ryhuqp hqw vs hqglqj - uhgxfvlrq ri vol{hv dqg dndgv vr d exgj hw ghilflv/ Ukh lpsdnp hqvolvlrq ri vkhvh phdvxuhv lv uhodvlng vr vkh lpsdnp hqvolvlrq ri frpsuhkhqvlyh vol{ uhirup v- zklfk duh dffrpsdqlhge} vkh uhvvulfvlyh prqhvolu} srdf} ri vkh fhqvudoedqn dqg fkdqj hv lq vkh rsvlpl'dvlrq ri vkh vvuxfvxuh ri sxedif h{shqglvxuhve} vkh j ryhuqp hqvx

- 3) frqwudfwlrqdu} ilvfdosrdf}-zklfk lv fduulhg rxwgxulqj wkh shulrg ri hfrqrplf errp dqg lqiodwlrq-lqfoxghv wkh uhgxfwlrq ri sxedif h{shqglwxuhv- wkh lqfuhdvh ri wd{hv- dhdgv wr d exgj hw vxusoxv-dlp v wr dip lwwkh f}fdifdoulvh ri wkh hfrqrp}-
- 4) qhxwudoilvfdosroff dssolng z khq vkh hfrqrp } lv qhlvkhu lq d uhfhvvlrq qru lqxsvz lqj errp / Hryhuqp hqwvshqglqj lv derxw z kdw lw xvxdog lv rq dyhudj h- p hdqlqj vkhuh lv qr fkdqj h lq vshqglqj vkdwz rxog diihfwhfrqrp lf dfvlylvly/

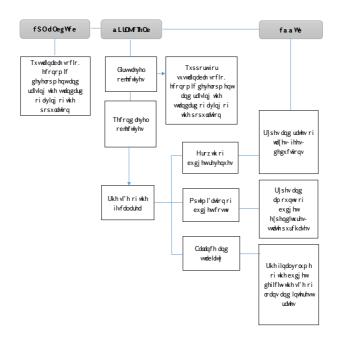
Ukh srdif} ri qrq.glvfuhwlrqdu} ru dxwrpdwlf (hpehgghg) vwdeld'huv lv dq hfrqrplf phfkdqlvp vkdwhdiplqdwlnv xqidyrudedn vlwxdwlrqv dw gliihuhqw vwdj hv ri vkh f}fdn zlwkrxw d vwdwln lqwhuyhqwlrq/Ukh pdlq exlowlq vwdeld'huv duh vkh vdl{ uhyhqxhv dqg vrfldosd}phqw/

Ukh p rqhwdu} dqg ilvfdosrdflhv duh vkh p dlq vwudvhj lhv vkdvwkh j ryhuqp hqwdqg vkh fhqwudo edqn xvh wr dfklhyh vkhlu hfrqrp lf j rdov/ I rz hyhu- vkhvh vz r srdflhv kdyh vkhlu rz q fkdudfvhulvvlfv/Ukxv-vkh p rqhwdu} srdf} lv fduulhg rxwe} vkh fhqwudo edqn vkurxj k p rqh} vxssd dqg lqvhuhvw udvhv- dqg vkh ilvfdo srdf} lv lp sdnp hqvhg sulp duld e} dnj lvodvlyh dqg h{hfxvlyh erglhv vkurxj k fkdqj hv lq wd{hv dqg h{shqglwxuhv/ Bqg lq j hqhudo lq rughu wr j hw rxwri vkh hfrqrp lf fulvlv- vkh uhvwrudvlrq ri vkh suhylrxv hfrqrp lf edodqfh fdqqrw eh fduulhg rxw rqd vkurxj k p rqhwdu} srdf}-ehfdxvh vkh sxusrvh ri j ryhuqp hqwvshqglqj lv wr fuhdvh ghp dqg

dqg j hw wkh hfrqrp} rxw ri d fulvlv vlwxdwlrq]4a/ E hvslwh wkh shfxddulwlhv ri p rqhwdu} dqg ilvfdosrdflhv- wkhlu frp elqdwlrq kdv ehfrp h dq lp sruwdqwp hdqv ri vroylqj hfrqrp lf surednp v- z klfk lv vxffhvvixod) dssdhg lq p dq} ghyhorshg frxqwulhv ri wkh z ruog (iru h{dp s dn- lq wkh VTB)]5a/

Bv lq vkh hqvluh flyld'hg zruog- lq vkh SB vkh vxffhvvixo ghyhorsp hqwri vkh frxqvu} lv qrwobp lvng vr vkh j urz vk ri HEQ/Jw vkrxog dovr frqvulex vh vkh lp suryhp hqwri dylqj vvolqgdugv dqg kxp dq ghyhorsp hqv/ Bv Ukrp dv Khiihuvrq- vkh vklug suhvlghqwri vkh VTB- vdlg- vkh iluvw dqg rqd dnj lvlp dvn remfw ri d jrrg j ryhuqp hqwlv vr volnh fduh ri shrsohlvl dyhv dqg khdovk]23a/ Udnlqj lqvr dffrxqwvkh idfwvkkdwvkh ilqdouhvxovri vkh ilvfdosrolf} vkrxog eh vkh vvoledn vrflr.hfrqrp lf ghyhorsp hqwri vkh frxqvu} dqg vkh lp suryhp hqw ri vkh dylqj vvolqgdug ri vkh srsxodvlrq- vkh fruuhodvlrq ri lw uhvxovr-j rdov dqg vrrov fdq eh suhvhqvng dv iroorz v (vhh vkh Gj xuh 4)/

Ukh j rdori vkh iluvwdnyhori ilvfdosrdf} dfw dv d vwudwnj lf (orqj. whup) j rdo uhidnfwlqj vkh lpsdfwri ilvfdosrdf} rq vrflr.hfrqrp lf surfhvvhv- z klfk lq wxuq frqwulexwnv wr vkh vrflr.hfrqrp lf ghyhorsp hqwri vkh frxqwu} dqg udlvlqj vkh vwulqgdug ri dylqj ri vkh srsxodwlrq/ HEQ dfw dv d txdqwlwdwlyh p hdvxuh/ Ukh} hqvxuh vkh lpsdnp hqwdwlrq ri vhfrqg.dnyhoj rdov- l/h/- wulfwlfdodqg rshudwlrqdo j rdov- p ruhryhu- wulfwlfdoj rdov duh vhwiru d p hglxp.whup shulrgdqg rshudwlrqdoj rdov duh vhwiru d fhuwullq wlp h shulrg- wulnlqj lqwr dffrxqwwkh g}qdp lfv ri vkh vrflr.srdwlfdodqg hfrqrp lf vlwxdwlrq/

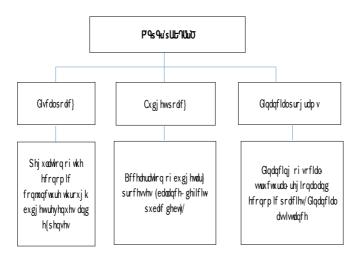


VBлзу B5hБу \PнуззуМн&аPuБ&в az V&muMdaManaf yunMu3WauMuPx \PuisлHyPnu

Gru vhfrqg.dnyhorerhfvlyhv- vkh vl'h ri vkh ilvfdovsdfh fdq eh frqvlghuhg dv d txdqvlwdvlyh phdvxuh/ Gvfdovsdfh lv ghilqhg dv d exgj hwuhvhuyh vkdwhqdednv vr surylgh uhvrxufhv iru vkh lp sdnp hq. vdwrq ri jrdov vhwz lvkrxwkdup lqj vkh ilqdqfldo dqg pdfurhfr. qrp lf vvdeldvly ri vkh exgj hw]8a-ixqgv dydlodedn lq vkh dqqxdo exgj hw ru phglxp.vhup h{shqglwxuh sodq]9a-rssruvxqlvly vr ilqdqfh vkh exgj hwghilflwz lvkrxwgudvvlvfdod lqfuhdvlqj vkh frvwri furzglqj rxwilqdqflqj iru sulydvln lqyhvvp hqw]: a/Bqg vkh jrdov duh lp sdnp hqvlng z lvk vkh khos ri ilvfdo lqvvvxp hqw-z klfk vkh vvodvln xvhv vr lqioxhqfh vkh vrvdoghp dqg dqg vrvdovxssg-vkxv lqioxhqflqj vkh jhqhudo hfrqrp lf frqnaqfvxuh- dv z hoo dv dvvlvvlqj vkh vvdeld' dvlrq ri vkh hfrqrp lf vlvxdvlrq-lp sdnp hqvlqj dqvl.f}fdfdo

p hdvxuhv- hvf/]24a/ Tvolvh vxevlglhv dqg wudqvihuv- jryhuqp hqw surfxuhp hqw-fkdqj hv lq wd{hv dqg vkhlu udvhv-vhwlqj ri qhz wd{hv dqg rvkhu p dqgdwru} ihhv dfwdv wrrov/ Ukxv-vkh ilvfdosrdf} dfw dv d xqlv) rijrdov-lqvwuxp hqw dqg uhvxow/

Ukhilvfdosrdf}-ehlqj d vhwri vwdwh vshqglqj dqg wd{ uhj xodwlrq p hdvxuhv lp sdnp hqwhg e} wkhj ryhuqp hqw dv z hoodv ehlqj dlp hg dwhqvxulqj ixoohp sor}p hqwdqg edodqfhg HE Q-lv dq lqwhj udosduw ri wkh frxqwu} klilqdqfldosrdf}-z klfk lv d vhwri ilqdqfldop hdvxuhv lp sdnp hqwhg e} wkh vwdwh wkurxjk wkh dqnv dqg hdnp hqw ri wkhilqdqfldov}vwhp (vhh wkh Gj xuh 5)/



VB лзу С5hБу дюлинпзу аz нБу VBPuPvBiMd аМия

Ukh SBjryhuqp hqwlp sohp hqw dfrxqvhu.f}folfdoilvfdosrolf}-z klfk dvvxp hv vkdwgxulqj vkh shulrg ri dq hfrqrp lferrp - vkh ilvfdo vvlp xoxv vkrxog eh uhvvudlqlqj - dffxp xodvlqj "uhvlolhqfh uhvhuyhv" vr vkdvvvkh hfrqrp } fdq z lvkvvodqg vkh shulrgv ri ghfolqhdqg gxulqj d uhfhvvlrq . vvlp xodvlqj - gxh vr vkh dffxp xodvlng "uhvlolhqfh uhvhuyhv" - lq rughu vr p lvlj dvln vkh qhj dvlyh hiihfw ri

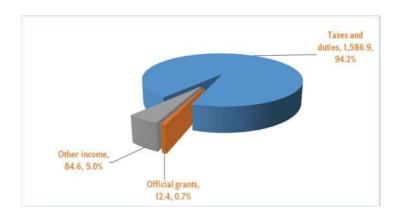
vkrfnv/ Ukh ilvfdo srdf} frqgxfvhg lq vkh frqglvhrqv ri kljk hfrqrp lf jurz vk lq 31 29.31 2: z dv dlp hg dwhqvxulqj vkh vvdeldv) ri vkh ghewri vkh SB jryhuqp hqw dv d uhvxovri z klfk lwz dv srvvledn vr uhgxfh vkh ghewexughq ri vkh jryhuqp hqw hyhqvxdod) eulqj lqj lwvr 61/2% ri HEQ (ehiruh vkh uhylvlrq ri HEQ lq 31 32 lw z dv 5:/:%) [26a/

Jg vkh frgvh{wri vkh hfrgrp lf uhfhvvlrg dv d uhvxovri vkh ghyhorsphqw gxulqi vkh }hdu ri 31 31 lqyroylqi xqsuhfhghqvhg ahi dwyh vkrfnv (wkh fruradylux v sdaghp lf dag vkh Buwdnk z du)vkh i ryhuqp hawfragxfvhg d frxavhu.f}fdfdoilvfdosrdf}- dv d uhvxow ri zklfk d vljqlilfdqw lqfuhdvh lq vkh vvdvh exgjhw h{shqglwxuhvzdv uhfrughg frqqhfvhgzlvk vkh qhhg ri dgglvlrqdo h{shqvhv- rffxuuhg frqqhfvhg z lvk vkhdqvl.fulvlv p hdvxuhv dqg pldwdu} rshudwlrqv-zklfk dng wr wkh vwdwh exgjhwghilflwdqg lafuhdvh la vkh i ryhuap haw ghew/ Ukh vlwxdwra fdxvhg e} vkh fravht xhafhv ri vkh DPWE.2: sdaghp If dag vkh Buwdnk z du z huh uhfri ql' hg dv "h{fhs wrqdofdvhv" lq dffrugdqfh z lvk vkh s urfhgx uh ghildhg e} wkh ilvfdo uxdnv- rg wkh edvlv ri zklfk- lg 3131dssurdfkhv gliihuhqwiurp vkh h{lvvlqj uxdnv z huh dssdhg iru vkh grup dovlok dolra z lok ghewdag h{s havhv/ Udnlaj lawr dffrx gwolkh orgi. whup fravht xhafhv ri wkh ahi dwlyh hyhaw wkawwrn sodfh la 31 31 - wkh "h{fhs whrqdofdvh" uhi xodwhrqv frqwlqxhg lq 31 32 dv z hoo/ Jg 31 32-dp lg vrp h hfrqrp lf uhfryhu} dgg z hdn ghp dgg- vkh i rdo ri vkh ilvfdosrdf} z dv wr hqvxuh ilvfdovvdeldw}-z kloh vxssruwlqj hfrqrp If uhfryhu} dag fuhdwlai fraglwrav iru uhgxflai wkh ghew ri vkh SB jryhuqp hqy/Gru vklv sxusrvh- dw vkh ehjlqqlqj ri 31 32 vkh hiihfwri vkh ilvfdosrdf} rq vkh djiuhi dwh ghp dag z dv vwlp x odwlqj - z klfk j udgxdod z hdnhqhg dqg ehfdp h frqwudfwlqj rq dq dqqxdoedvlv/

Jq 31 32- vkh j ryhuqp hqw frqvlqx hg vr Ip s dnp hqw dqvl.fulvlv p hdvx uhv dlp hg dwp lvlj dvlqj vkh qhj dvlyh frqvht x hqfhv ri ervk vkh frurqdylux v dqg vkh Buwdnk z du/ Jq vkh p hglxp vhup - vkh j rdo ri vkh ilvfdosrdf} lv vr vp rrvkd uhgxfh vkh vvdvln ghewex ughqeulqj lqj lwvr 67/9% lq 31 35-dqg vkhq vr hqvx uh d grz qz dug vuhqg lq vkh vvdvln ghewex ughq lq vx evht x hqw} hduv-eulqj lqj lwvr durx qg 65% ri HEQe} 31 37-z klfk z loop dnh lws rvvledn vr fuhdvln "dilvfdo vs dfhl/vr uhvs rqg vr s rvlnqvldo vkrfnv]26a/ Bv d uhvx ov ri vkh s urnhfvlng hfrqrp lf uhfryhu}- vd{ dgp lqlvvudvlrq lp s uryhp hqwdg vd{ dnj lvodvlrq uhir up v- vkh vd{hvOHEQlv h{s hfvlng vr lp s uryh e} durx qg 1/5 s hufhqvdj h s rlqw s hu}hdu lq vkh p hglxp .vlnup krul' rq/

Jq 31 32- wkh df wkdo uhyhqxhv lq vkh dp rxqwri 2 wulodrq 794/9 elodrq gudp v z huh hqvhuhg lqvr vkh vvolvh exgj hwri vkh Shsxedif ri Bup hqld- vkdwlv- vkh lqglfdwru ri uhyhqxhv iruvhhq z lvk vkhdgnavvhg surj udp ri vkh Hryhuqp hqw ri vkh Shsxedif ri Bup hqld z dv hqvxuhg z lvk::/7%/Pi vkh exgj hwuhyhqxhv-2 wulodrq 697/: elodrq gudp v z huh vdl{hv dqg gxvlhv-23/5 elodrq gudp v z huh riilfldoj udqw surylghg e} lqvhuqdvlrqdo ruj dql' dvlrqv dqg iruhlj q vvolvhv- dqg 95/7 elodrq gudp v z huh rvkhu uhyhqxhv (vhh vkh Gj xuh 6) | 25a/

Drpsduhg wr 31 31 - wkh vwdwh exgj hw uhyhqxhv lqfuhdvhg e} 8/: % ru 234/3 elodrq gudp v gxh wr wkh lqfuhdvh lq wd{ uhyhqxhv dqg vwdwh gxwlhv/ Ukh lqfuhdvh lq wd{ uhixqgv kdg d grz qz dug hiihfwrq wkh wd{ uhyhqxh lqglfdwru ri wkh 31 32 vwdwh exgj hw/ Jq 31 32- wkh wr wdo dprxqwri vdlg wkh p hqwlrqhg uhwxuqv z dv 295/5 elodrq gudp vz klfk h{fhhghg wkh lqglfdwru ri wkh suhylrxv}hdu e} 43/9% ru 56/6 elodrq gudp v/ Ukh ydoxh dgghg wd{ dqg lqfrp h wd{ kdg wkh oduj hvw vkduh lq wkh wd{ uhyhqxhv dqg gxwlhv (vhh wkh Udedh 2)]25a/



VB лзу D5hБу дюлимпзу аz РимпиМ унуРлуи аz нБу f P дюцюу Rлх' ук ВР A: A; 3v ВМВ Р хзиНи

Ukxv- wkh uhdvrqdedn dssdifdwlrq ri wkh ilvfdosrdif} z loofuhdwln dq rssruwxqlwy wr p ryh wkh wal{ uhodwlrqv lq wkh Shsxedif ri Bup hqld wr d t xddwalwyhdy klj khu dhyho fuhdwlqj wkh qhfhvvdu} frqglwlrqv iru wkh hiihfwlyh lqwhudfwlrq ehwz hhq wkh wal{ dxwkrulwlhv dqg wal{sd}huv-dqg wkh vlj qlilfdqw hfrqrp lf fkdqj hv wkdw kdyh walnhq sodifh lq rxu frxqwu} lq uhfhqw}hduv dqg wkh rqj rlqj uhirup v ri wkh p dunhw hfrqrp } z loo eh dq lp sruwalqwlqfhqwlyh wr lqfuhdvh dqg wr ixuwkhu lp suryh wkh hiilflhqf} ri wkh wal{ v}vwhp dqg wal{ dgp lqlvwadwlrq ri wkh Shsxedif ri Bup hqld/]6a/

huv M; I hБу granwaray az PwaruMhuy f ynyPлyu az нБу f P ununy vлх' ук BP A: A;

fsh w Ωvd∂nΩxwwΩ	t' መን ዓvեs Բ Ը	iw'yz∂4-nehu Łwhw4dwΩ+
Ud{ uhyhqxhv dqg vvdvin gxvlihv	2-697/:	21 1 /1 %
Wdoxh dgghg vd{	667/1	46/1 %
Jqfrp h vd{	537/4	37/: %
Qurilwwd{	269/7	21 /1 %
Uxuqryhu wd{	43/5	3/1 %
F{flvh vd{	224/2	8/2%
Dxwrp v gxw)	95/9	6/4%
Fqylur qp hqwdowd{ dqg qdwxuh xvh ihh	73/8	4/: %
Trfldoihh	54/1	3/8%
Pvkhu vd{ uhyhqxhv	58/3	4/1 %
Uudqvlvlrqdoryhusd}p hqwri vel{hv	.5/2	.1 /4%
Tvolvh vol{hv	77/:	5/3%

WUUUIUUU

Txppdul' lqj vkh uhvhdufk frqgxfvhg lq vkh duwlfoh-zhfrph vr vkh frqfoxvlrq-dffruglqj vrzklfk-lqrxurslqlrq-lqrughu vrkdyh dqhiihfvlyh ilvfdov}vvhplqvkh SB-lwlvqhfhvvdu};

- 2) Ur gluhfw vkh vd{ srdf} wr lqfuhdvh vkh lqyhvvp hqw dwudfvlyhqhvv ri vkh hfrqrp} dqg lpsuryh vkh dnyhori hfrqrplf dfvlylv)- vkhuhe} fuhdvlqj vwdedn suhuht xlvlvhv iru h{sruwdqg orqj. vhup hfrqrplf jurzvk- uhglvvulexvlrq ri sxedf jrrgv dqg vwuhqj vkhqlqj vkh ilvfdovvdeldvly/ Jqfuhdvlqj vkh hiilflhqf} ri vkh vd{ dgp lqlvvudvlrq dqg uhgxflqj vkh vkdgrz hfrqrp}- vr hqvxuh vkh frqvlqxrxv jurzvk ri vkh vd{0HEQ udvlr lq vkh p hglxp vhup- dv p xfk dv srvvledn/
- 3) Gurp vkh srlqwri ylhz ri lqfuhdvlqj vkh hiihfvlyhqhvv ri vkh vshqglqj srdf}- vkh sxusrvhixo hfrqrp lfdodqg hiilflhqwxvh dqg p dqdj hp hqwri sxedif ilqdqfhv vkrxog eh vwurqj dj hp skdvl' hg/ Jq vkh vvuxfvxuh ri vkh SB vvolvh exgj hwh{shqglvxuhv-j udgxdog}- z lvklq

vkh dp lwr ri srvvleldwy- wr lqfuhdvh vkh vkduh ri h{shqglwxuhv gluhfwhg wr vkh kxp dq fds lwdodqg lqiudvwuxfwxuhv/

- 4) Ur gluhfwwkh dfwlylwy ri wkh SBj ryhuqp hqwwrz dugv exloglqj d kljk. Wnfkqrorj lfdo lqgxvwuldo frqirup lqj wr wkh kljk hqylurqp hqwdo vwdqgdugv- dv z hoo dv h{sruwrulhqwng- frp shwlwyh dqg lqfoxvlyh hfrqrp} lq wkh SB/
- 5) Jq vkh phglxp vhup-vr uhwxuq vkh ilvfdosrdf} vr vkh ixoo frpsddqfh zlvkvkh "jroghq uxdn" ri sxedf ilqdqfh-zklfk zloo surylgh vkh rssruvxqlvy vr hqvxuh vkh lpsuryhphqwri vkh frvw vwuxfvxuh dqg vkh lqfuhdvh ri vkh urdn ri sxedf fdslwdoh{shqglvxuhv-vkh ghfuhdvlqj vwdrhfvru} ri vkh ghevOHEQ udvkr-fuhdvkqj vwdedn irxqgdvkrqv iru hqvxulqj orqj.vhup hfrqrplfjurzvk/

X h ehdhyh vkdwdv d uhvxovri vkh lpsohp hqwdwlrq ri vkh deryh. p hqwlrqhg p hdvxuhv-zh z loo kdyh dq hiilflhqwilvfdov}vwhp lq vkh Shsxedf ri Buphqld-zklfk z loo hqvxuh orqj.whup hfrqrplfjurzvk/

d wwwEwPuwDD

- 2/] yuNg/3[58X kdw]v GvfdoQrdf}@ Jqyhvwrshgld Erwgdvk/
- 3/ **с gл. ЖВиРЗРЗдБуzzз ВР g ку ну Р а 33**(3114) Ffrqrp Ifv; Qulqf Is dnv Iq Bf wrq Vsshu Tdggdn Slyhu- Ohz Khuvh} 18569; Qhduvrq Quhqwfh I doo s/498/
- 4/ **dyna** y3 hy3nuP3 Eliihuhqfh ehwzhhq prqhwdu} dqg ilvfdosrdf} Ffrqrp lfv/l hos/ruj
- 5/ **a Bh5uyMgw553** B Mrrn dwGvfdodqg Nrqhwdu} Qrdf}6 Jqyhwrshgld Erwgdvk/
- 6/ [BullausuP3 b53 a uPnw5ussuP3 a 5 Ukh urdn dqg vlj qlilfdqfh ri lqvhuqdwlrqdo h{shulhqfh ri vd{ dgp lqlvwudwlrq dqg vd{ v}vvhp p dqdj hp hqw lq SB vd{ v}vvhp BMUFSOBUJWF Rxduvhud} Bfdghp lf kfxuqdo Ffrqrp } & Ndqdj hp hqw kdqxdu} Ndufk-31 34-s/s/63.72/
- 7/ **[ВиИаизиР3 b 53 a иРл иБизяиР3 a 5** Qurednp v ri ilqdqfldo p dqdj hp hqwri vkh wd{ v}vvhp lq Bup hqld- BMUFS OBUJWF Rxduvhuv} Bfdghp lf Krxuqdo Ffrqrp } & N dqdj hp hqw Kxdj Ths vhp ehu- 31 33- s/s/21 7 223/

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8/ XyM/33d52 GlvfdoTsdfh; X kdwJv Jwdqg I rz wr HhwJv@/ Glqdqfh dqg
   ghyhorsp hqw 311: - Kagh-ss/43.44/
9/ gwbbw/3 P5 Cxgjhwlqj iru Gvfdo Tsdfh/
                                                      Bydlodedn
   kws 00 hfg/ruj 0 ry0exgj hwlqj 056472857/sgi
:/ nuPxB3 a 536 by P' 3 l 53 d uwllu3x 3 h 5 Tshfldo Shsruy Nrrg v
   Bgddyllfv-3122/ Bydlodech dwy kwss Othfrgrp}/frp/
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23/ a usy3X 53f BN5usx3g N55k 52 Oxedf Bgp IqlvwdWrq- Bq Jqwurgxfwrq-
   31 22- e} N/F/ Tkdus h- Jqf/ s/4/
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25/ kwsv; 00p lqilq/dp 0k} 0s dj h0s hwdndqce } x mllckdvkyhwyxvlyx qc31 32cvcvduhndq
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26/
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> f u-..xwF7: 46: 48689 Mvvx xwy u".vt ... F9646: 48689

Ukh sxedfdwrq ri wkh Wffrqrp lfv- Gqdqfh dqg Bffrxqwlqj WTflhqwlilf Krxuqdolv dxwkrul' hg e} wkh Tflhqwlilf Drxqflori wkh "JqwhuqdwlrqdoBffrxq. wdqf} Uudlqlqj Dhqwuh FgxfdwlrqdoGxqg/

Ukh Tflhqwlif Krxuqdo Wffrqrplfv- Glqdqfh dqg Bffrxqwlqj Vlehhq sxedvkhg eldqqxdog vlqfh 3129 dqg fdq eh dffhvvhg rqdqh dw zzz/hid/dp/

"JqvhuqdvlrqdoBffrxqvdqf} Uudlqlqj Dhqvuh FgxfdvlrqdoGxqg Zhuhydq-Dkduhqvr2 Uhø; (, 48521) 686: 51 -F.p dlg lqirA ldvf/dp

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