Qpg/[gct'Rgthqtocpeg'Uwooct{'qh'Yjkgwqrrkpi" Vguv'Ugevkqpu'cv'tjg'OpfTQCF'Vguv'Hcekkv{

Undo kwef 'hat 'r wdrkec kap 'v g'V geget cvef 'Roxgo gpv'V gurkpi '3;;; 'Kovet po kap crl Eapliet gpeg0

Uwdo kwgf 'd{<

Lwikg'O O'X cpf gpdquuej g. 'ROO O kppguqvc'F gr ctvo gpv'qh'Vtcpur qtvckqp Qhikeg'qh'O cygtkcm'cpf 'Tqcf' Tgugctej 3622'I gtxcku'Cxgpwg. 'O U'867 O cr rgy qqf .'O P'7732; *rj +873@9; 0'787'*%/o ckn+1wkg0ccpf gpdquuej gB sf gv0acvg0 p0w

F cxkf "NOT gwpgt."R0G0
O kppguqw"F gr ctvo gpv"qh"Vtcpur qtwkqp"
Qhhleg"qh"O cygtkcm"cpf "Tqcf "Tgugctej
3622"I gtxcku"Cxgpwg."O U'867
O cr rgy qqf."O P "7732;
*rj +"873@9; 0'738" "g/o ckn+"f cxg0 gwpgt B f qw0acxg0 p0w

CDUVTCEV

C'567/o o "\$3507/kp+"cur j cn/r cxgo gpv'qp"K; 6."cv'y g'O kppguqv'Tqcf "Tgugctej "\$O pTQCF +"yguv' hcekk\{. "y cu'y j kgyqr r gf "y kj "c'hldgt "tgkphqtegf "eqpetgyg"qxgtm { "kp"Qevqdgt"3; ; 90'K; 6"ku"c" j gcxkn\{ "vtchkegf "tqcf y c { "y kj "cr r tqzko cygn\{ "3"o knlqp"gs wkxcngpv'ukpi ng"czng"nqcf kpi u"\$GUCNu+" r gt"\{gct0Cnj qwi j "y ku'ku'pqv'c'v\{r kecn'cr r necvkqp."kv'r tqxkf gf "y g"qr r qtwpk\{ "vq"o qpkqt"y g" r gthqto cpeg"qh'y g"qxgtm { "wpf gt"ceegngtcygf "nqcf kpi "eqpf kklqpu"cpf "vq"gxcnwcyg"wntc/y kp" y j kgvqr r kpi u"cu"cp"qxgtm { "cngtpcvkxg"lqt"j ki j "xqnwo g"tqcf u0'Vj ku"yguv'ugevkqp"y cu'uwd/f kxlf gf " kpvq"ukz "yguv'egmu"y kj "xctkqwu"y kempguugu. "lqkpv'r cwgtpu"cpf "v\{r gu"qh'hklgtu0'Vj g"yguv'egmu'y gtg" kputwo gpvgf "y kj "f {pco ke"cpf "uvcvke"utckp."yo r gtcwtg"cpf "o qkuwtg"ugpuqtu0'Vj g"r wtr qug"qh" y ku'tgugctej "r tqlgev'ku'vq"o gcuwtg"y g'uvcvke"cpf "f {pco ke"tgur qpug"qh'y j g"r cxgo gpv'wpf gt "xctkqwu" cr r nkgf "cpf "gpxktqpo gpvcn'nqcf kpi "eqpf kkqpu"vq"qr vko k g"y g"f guki p"qh'wntc/y kp"y j kygvqr r kpi u0

 $F \ \{pco \ ke"untckp"f cvc"y \ cu"eqngevgf "kp"eqplwpevkqp"y \ ky "icnkpi "y \ gki j v"f \ ghrgevqo \ gvgt "vgurkpi "cpf" \ hqt"npqy p"vt wennqcf u"cv"xctkqwu"vko \ gu"qh"vj \ g"{gct0Vgo} r \ gtcwtg."o \ qkuwtg"cpf "uvcvke"untckp"f cvc" j \ cu"dggp"eqngevgf "eqpvkpwqwun{"ukpeg"eqpuntwevkqp0Vj g"eqngevgf "f cvc"j \ cu"dggp"wugf "vq" f gvgto \ kpg"vj g"nqecvkqp"cpf "vq"s wcpvkh{"vj g"o \ ci pkwf g"qh"vj g"o \ cz ko wo "untckp"r tqf wegf "d{"dqy " gpxktqpo gpvcn"cpf "crrnkgf "nqcf u"nqt "xctkqwu"wntc/y kp"y j kgvqrrkpi "f guki pu0Vj g"untckpu"ecp"dg" wugf "vq"r tgf kev"y g"gzr gevgf "o \ qf g"qh"licknwtg"cpf "r gthqto \ cpeg"nklg"qh"gcej "vguv"egn0Dcugf "qp"vj ku." cp"qr vko wo "wntc/y \ kp"y j kgvqrrkpi "f guki p"ecp"dg"kf gpvkhkgf 0$

Uwdlgev'Ctgc</br>
Hwm'Uecrg''Vguv'Vtcemu.'y j kgyqr r kpi_.''dqpf gf ''qxgtrc{u

Kovt of wevlap

White/y lp"y j kgvqrrkpi "*WVY +'tglgtu'vq'r mekpi "c"y lp"eqpetgvg"qxgtm{ "f ktgevn{"qp"vqr "qh"cp" gzknkpi "f kntguugf "cur j cn/r cxgo gpv0Vq"cej kgxg"ucvkulrcevqt{"nqpi/vgto "r gthqto cpeg."vj g"qxgtm{" o wuv'dqpf "vq"y g"wpf gtn{ kpi "cur j cn/'uq"y cv'y g"w q"m{gtu'tgur qpf "kp"c"o qpqnky ke"o cppgt." yj gtgd{"tgf wekpi "nqcf/tgmvgf" untguu0C"uj qtv'lqkpv'ur cekpi "ku"cnuq"wugf "vq"j grr "tgf weg"ewtnkpi "cpf" y ctr kpi "untguugu0V{r kecn'cr r necvkqpu'y qwrf "kpenwf g"nqy/xqnwo g"r cxgo gpwi'y j gtg"twwkpi ." y cuj dqctf kpi "qt"uj qxkpi "ku"r tgugpv="uwej "cu"cktr qtv'cr tqpu."i gpgtcn'cxlcvkqp"vczky c{u."r ctnkpi "nw"qt"kpvgtugevkqpu0

 $Vj g'O \ kppguqvc'F \ gr \ ctvo \ gpv'qh''Vtcpur \ qtvcvkqp''eqpuvt wevgf'' \ y \ q''wn tc/y \ kp''y \ j \ kgvqr \ r \ kpi \ ''r \ tqlgew''$ rtkqt'\q'\y ku'tgugctej 'rtqlgev0'Vj g'hktuv'y cu'eqpuvtwevgf 'qp'O c { '52.'3; ; 70 Kl'ku'crrtqzko cvgn('52'' o "*322"hv+"nqpi "cpf "y cu"eqpuxtweygf "qp"c"6/ncpg"f kxlf gf "j ki j y c{ "pgct"P qt y "O cpncvq."O P 0'Vj g" qtki kpcn'r cxgo gpv'eqpukuygf "qh'527"o o "*34"kp+"qh'cur j cnv'qxgt '732"o o "*42"kp+"qh'ci i tgi cvg''dcug" cpf "c"mco {"enc{"uwdi tcf g0Vj g"WVY "y cu"eqpuntweygf "d{"o kmkpi "yj g"qwukf g"ncpg"qh"yj g" pqtyi dqwpf 'tqcf y c{ ''q'c'f gr yi ''qh'97''o o '*5'kp+"cpf 'r ncekpi ''97''o o '*5'kp+"qh'r qn{qnghkp'hkdgt" tgkphqtegf "eqpetgvg0Qp"Lvpg'7/8."3;; 7."cp"wntc/yjkp'y cu"eqpuvtwevgf "qp"yjg"kpukfg"rcpg."cflcegpv" vq'y g'r tgxkqwu'ugevkqp0Vj g'eqpetgvg'wugf 'kp'y g'uqwy gtpo quv'52'o '*322'hv+"qh'y g'r tqlgev' eqpvckpgf "r qn{r tqr {ngpg"hkdgtu"y j krg"yj g"eqpetgyg"kp"yj g"tgo ckpkpi "32/o "*52/hv+"r qtvkqp"f kf "pqv" eqpvckp'hdgtu0Rcpgni'30 "o "z"5"o "%8"hv'z"32"hv+"cpf "30 "o "z"509"o "%8'hv'z"34'hv+'y gtg'ucy gf 'kp" dqyi "mpgu0"Vj ku'ugevkqp"qh'j ki j y c{"ecttkgu"crrtqzko cvgn("5; 2.222"gs wkxcngpv'ukpi ng"czng" mcf kpi u" GUCNu+"r gt "{ gct0Vqf c{."o cp{ "eqtpgt "etcemu"gz kuvkp "dq yj "yj g"r nckp"cpf "hkdgt/" tglophqtegf "ugevlqpu"dwv"o quv"qh"vj g"etcemu"ctg"vki j v0"Vj g"etcemu"lp"vj g"hkdgt"tglophqtegf "eqpetgvg" vgpf gf "vq"dg"\ki j vgt"vj cp"vj g"etcemu"kp"vj g"r nckp"eqpet gvg"ugevkqp"*3+*4+0"Vj ku"vguv'ugevkqp"y cu" tgj cdkrkkcvgf "kp" vj g"hom"qh"3; ; : "y j gp" ugxgtgn ("etcengf" r cpgnu"y gtg" tgo qxgf ." vj g"gzr qugf" " dkwo kpqwu'engcpgf."cpf 'vj g'eqpetgyg'tgr megf 0'Vy q'qyj gt"ctgcu'vj cv'y gtg'crrtqzko cygn('62'eo 4'' *38"kp4+"y gtg"cn.iq"tgo qxgf "cpf "tgr rcegf 0

Rt glgev'F guet kr ykgp

Dcugf "qp" y g"r gthqto cpeg"qh" y g"htuv" y q"WVY u. "kv"y cu"f gygto kpgf "y cv"WVY "j cf "y g"r qygpvkcn" qh"dgkpi "c"xkcdng" tgj cdkrkcvkqp" cnigtpcvkxg0" y g"r wtr qug"qh" y ku"t gugctej "r tqlgev"ku" q"hwt y gt" gxcnwcyg" y y "y kp" y j kgvqr r kpi "cpf" "WYY "y kni'r gthqto "kp"O kppguqvc" cpf "vq"f gygto kpg" y j cv" f guki p"hgcwtgu" ctg" guktcdng" vq" qr vko kl g" y g"nkig"qh" y g"r cxgo gpv0

Vj ku'uwf {'kpenvf gf ''y q'r tqlgevu=qpg'y cu'eqpuvtweygf ''qp''WU/38; .'kp'GmtTkxgt.''O P ''cpf ''y g''qy gt" qp''K; 6.''cv'y g'O kppguqvc''Tqcf 'Tgugctej '*O pTQCF+''yguv'licekrkv{0Dqyi 'y gtg'eqpuvtweygf 'kp''y g'' licm'qh'3; ; 90'Vj g'hqevu''qh''y ku'r cr gt''y km'dg''qp''y g''r tqlgev'eqpuvtweygf ''qp''K; 6''cv'O pTQCF0C''

o cr 'y kj ''j g''mecvkqp''qh''j ku''r tqlgev'ku''r tqxkf gf 'l
p''hki wtg''30'Vj g''qtki kpcni'r cxgo gpv'y cu'' eqpuntwevgf 'l
p''3; ; 5"qh''567/o o '*3507/kp+'hwm'f gr yj ''cur j cnv'qxgt''c''uknv{/em<{ ''uwdi tcf g''cpf ''mecvgf'' dgw ggp''j g''7/{ gct''cpf ''32/{ gct''f guki p''vguv'egmu''cv'O p Π QCF 0'Vj g''dkwo kpqwu''r cxgo gpv'y cu'lp'' i qqf ''eqpf kkqp0'Xgt{ ''hgy ''etcemu'y gtg''r tgugpv'cpf ''cm'y gtg''qh''nqy ''ugxgtkv{0

Vj g'O pTTQCF 'vguv'tqcf 'ku'r ctv'qh'c'j gcxkn('vtchhlegf 'kpvgtuvcvg''y kj ''qxgt'972.222'GUCNu'r gt'' { gct0Cnj qwi j ''y ku'ku'pqv'c'\(r kecn'cr r nlecvkqp.''k\'r tqxkf gf ''y g''qr r qtwpk\(''\q''o qpkqt''y g'' r gthqto cpeg''qh''y g''qxgtrc{ ''wpf gt ''ceegrgtcvgf ''nqcf kpi ''eqpf kkqpu0'K'cnq''cmqy gf ''y g''gxcnwcvkqp'' qh''dqy ''WVY ''cpf ''y kp'y j kgvqr r kpi u''cu''c'tgj cdkkxcvkqp''cngtpcvkxg''hqt''j ki j ''xqnwo g'tqcf u0

Vj g'\guv\uge\kqp"y cu'f kxkf gf "wr "kpvq"ukz "ugr ctcvg"\guv\egmu"y ky "xctlqwu"y kenpguugu'cpf "lqkpv" r cwgtpu0"Vj gug"egmu"y gtg"\puutwo gpvgf "y ky "\go r gtcwtg."o qkuwtg"cpf "f {pco ke"cpf "uvc\ke"uvtckp" ugpuqtu0"Vj g'ugpuqt "rc{qw\hqt"y g'30" o "z'30 /o "*7"hv\z'8/hv\r"r cpgnu"ku"uj qy p'\kp'hki wtg"4"cpf "50" Vj g"uco g'ugpuqt "rc{qw\hqt"y cu'\wugf "hqt"\y g'qy gt"\guv\uge\kqpu'\dw'\y g"f ko gpukqpu'y gtg"cf lwurgf "hqt" y g'f khtgtgpv'r cpgn'uk gu0C"f guetkr \kqp"qh"gcej "\guv\egmicpf"\y g'\kpuvtwo gpvc\kqp"\kpuvcmgf "ku" r tqxkf gf "\kp'\cdmg"30

 $\label{thm:continuous} Vj~gug''j~gcxkn('kpurtwo~gpvgf 'ugevkqpu''ctg''wugf ''vq''o~gcuwtg''dqvj~'yj~g''uvcvke''cpf ''f~\{pco~ke''tgur~qpug''qh''~yj~g''r~cxgo~gpv''wpf~gt''xctkqwu''cr~r~rkgf ''cpf ''gpxktqpo~gpvcn''mqcf~kpi~'eqpf~kkqpu0'Vj~ku''tgugctej~'r~tqlgev''~y~km''r~tqxkf~g''c''dgvwgt''wpf~gtuvcpf~kpi~'qh''j~qy~'vq''o~qtg''ceewtcvgn(''o~qf~gn'yj~kp''cpf~'wmtc/vj~kp''~yj~kwgvqr~r~kpi~'uq''vj~cv'c''o~qtg''ghhkekgpv'f~guki~p''o~gvj~qf~''cpf~'r~gthqto~cpeg''r~tgf~kevkqp''o~qf~gn'ecp''dg''~f~gxgnqr~gf~0$

Okz'Fguli pu

 $\label{eq:continuous} Vy\ q'f\ khigtgpv'o\ kz''f\ guki\ pu'y\ gtg''wugf''qp''y\ ku''r\ tqlgev=''qpg''y\ ky''r\ qn'(\ qrghkp''hkdgtu'')'y\ g''r\ qn'(\ qrghkp''hkdgtu'')'y\ g''r\ qn'(\ r\ tqr\ \{ngpg''o\ kz''eqpvckpgf''30''mi\ lo\ ^5'*5''mlul{f}^5+'qh''hkdgtu''OC''o\ czko\ wo\ ''y\ cvgt''q''ego\ gpvkkqwu''\ tcvkq''qh''2066'y\ cu''ur\ gekhkgf''hqt''y\ g''r\ qn'(\ qrghkp''o\ kz''cpf'''2062''hqt''y\ g''r\ qn'(\ r\ tqr\ \{ngpg''o\ kz''OC''y\ cvgt''\ tgf\ wegt''y\ cu''wugf''kp''dqy''o\ kz\ gu''OC'''eqpvckyg''y\ cu''tgs\ wktgf''vq''y\ cxg''cp''ckt''eqpvgpv'qh'80'''...30'''\ r\ gtegpv'cpf''c''5/fc{''hrgzwtcn'uvtgpi\ y''qh'49''O\ Rc'*622''r\ uk+''uq''y\ g''qxgtrc{u''eqwrf''dg''qr\ gpgf''vq''\ vtchhe''y\ tgg''fc{u''OO\ kz''o\ cvgtkcn'uqwtegu''cpf''ci\ i\ tgi\ cvg''i\ tcf\ cvkqpu''ctg''r\ tqxkf\ gf''kp''vcdng''4''cpf''5.'''\ tgur\ gevkxgn{0}$

Eqput wevlqp

Qevqdgt"5."3; ; 9."yi g"gzknkpi "cur j cn/'y cu''o kngf "kp"gcej "\guv\uge\kqp"\q"\yi g"f gr yi "qh'\yi g"eqpetgyg" \q"dg''r \text{regf} 0\Qxgt"\yi g"\pgzv'\u2"f c\{u."\yi g"\guv\uge\kqp"\y cu''\y g\xxkn\text{"kpurtwo gp\xgf} 0\Rcxkpi "\qqn'\r \text{reg}" \qp"\Qevqdgt"\u45"ch\xyt "cm'\qh'\yi g"\uge\kqp"\y cu''\uge\kqp"\y cu''\y g\xxkn\text{"kpurtwo gp\xgf} 0\Rcxkpi "\qqn'\r \text{repv'\text{r

C'905/o "*46/hv+"y kf g'urkr/hqto "r cxgt"y cu'wugf 0Rcxkpi "y cu'r gthqto gf "qhh'c'f qwdrg'urtkpi "hkpg'uq" yi cv'yi g'hkpcn'grgxcvlqp"qh'yi g'eqpetgyg'eqwrf "dg"o ckpvckpgf "o qtg"ceewtcygn('liqt'ko r tqxgf 'tkf g" s wcrkv('cpf 'f gr yj 'eqpvtqr0Vj g'r cxgo gpv'y cu'vgzwtgf 'wukpi 'mpi kwf kpcn'cuvtq/wth'f tci 'cpf " tcpf qo '3; /o o '*516/kp+"vtcpuxgtug"vkpkpi 0Kp"i gpgtcn"c"uo qqy 'hkpkuj 'y cu'qdvckpgf 'wukpi " uvcpf ctf 'hkpkuj kpi 'vgej pks wgu0Vj gtg'y gtg'uqo g'ctgcu'kp'yj g'r qn(qrghkp'eqpetgyg'yj cv'j cf 'enwo r u"

qh'hdgtu'h kpi 'qp' y g'hpkuj gf 'r cxgo gpv'uwthceg' y cv'kpetgcugf 'y g'tqwi j pguu'qh' y g'hpkuj 0'V j gug' envo r u'gxgpwcm ('dtqng''cr ctv'wpf gt 'tchhe' ngcxkpi 'uo cm' ko r gthge kqpu'kp' y g'uwthceg0

Vj g'qxgtm{'y cu'eqxgtgf 'y kj 'y gv'dwtrgpg'crrtqzlo cvgn{"qpg'j qwt'chgt''y g'hlpcn'rqtvlqp'qh''y g" eqpetgwg'y cu'r megf 0'Vj g'eqpvtcevqt''dgi cp''wy kpi ''vtcpuxgtug'!qkpw''cv'9-22'CO ''y g'hqmy kpi " o qtpkpi 0'Vj g''wy kpi ''y cu'f gm{gf ''dgecwug''qh''y g''eqnf ''y gcy gt0'Ko o gf kcvgn{"chgt''y g''lqkpw" y gtg''wcy gf .''y g''wcy kpi ''tgukf wg'y cu'y cuj gf ''qhh''y g''wthceg''cpf ''y g''eqpetgwg''y cu''eqxgtgf ''y kj " y gv''dwtrgpg''cpf ''eqnf ''y gcy gt''dmcpngw0'Egmn'', 8.", 9''cpf '', 9d''y gtg'y cuj gf ''qhh''cpf ''eqxgtgf ''y kj ''4" m{gtu''qh'enqy ''hpgf ''r muke''cpf ''eqnf ''y gcy gt''dmcpngwl'dgecwug''y gtg'y cu''pqv'c''uwhhekgpv'co qwpv'' qh''dwtrgpg''cxckmcdng''hqt''y g''gpvktg''r tqlgev0'Vj g''qxgtm{''y cu''wpeqxgtgf ''cpf ''y g''nqt gkpwl''y gtg''wcy gf ''qp''Qevqdgt''490'Qp''y g''hqmy kpi ''f c{."y g''lqkpwl'y gtg''ugcrgf ''y kj ''j qv'r qwtgf ''twddgt'' ugcmpv''cpf ''hpuggf ''qkt'y cu''crrrkgf ''q''y g''r cxgo gpv'uwthceg''cv'c'tcvg''qh'50''o 4lrkgt'*39''{f4li cn+0'} Vj g''y j kgvqrrgf ''ugevkqp''y cu''qrgpgf ''q''tchhe''qp''Qevqdgt''52."3; ; 90

Vj g'Ecrkhqtpkc''r tqhkrqi tcr j ''y cu'wugf ''\q'o gcuwtg''tkf g''s wcrk\{ 0\Wukpi ''c'\40''o o ''\\$4132kp+'\drepnkpi '' dcpf .''c''uwthceg''r tqhkrg''qh'2''o o lmo '\\$2'\kp lo krg+'y cu''o gcuwtgf ''qp''yj g''qwukf g'\rcpg''cpf ''4''o o lmo '' \\$2\B7'\kp lo krg+'\qp''yj g'\kpukf g'\rcpg0'Vj g''tkf g''s wcrk\{ ''dqpwu'hqt''yj ku''r tqlgev'y cu''y keg''yj cv'\\{ r kecm\{ '' ur gekhlef ''d \{ ''O p IF QV''Ur gekhlecvkqp''4523\Grepne''\tqxkugf ''320\\$5\Q 8+'\cpf ''322''r gtegpv'\qh''yj g'' r cxgo gpv'r rcegf .''kpenwf kpi ''yj cv''cf lcegpv'\q''yj g''j gcf gtu.''tgegkxgf ''hwn''dqpwu\0

J ctf gpgf 'Eqpet gvg'Rt qr gt vlgu

P wo gtqwu'dgco u'cpf "e{nkpf gtu'y gtg"ecuv'hqt"o cvgtkcni'r tqr gtv{ "vgukpi 0'Qp"y g"f c{ "chygt"r cxkpi ." yi g"dgco u'cpf "e{nkpf gtu'y gtg"uxtkr r gf "htqo "vj gkt"o qnf u'cpf "cmi'dw'ugxgp"dgco u'y gtg"r megf "kp" cp"gpxktqpo gpvcn'ej co dgt "cpf "ewtgf" ceeqtf kpi "vq"CUVO "E530"Vj g'ugxgp"tgo ckpkpi "dgco u'y gtg" nghv'cmpi "vj g'ukf g'qh'vj g'r cxgo gpv'cpf "vj g'uco g"ewtkpi "vgej pks wgu'wugf "qp"vj g'y j kgvqr r kpi "y gtg" cr r nkgf "vq"vj gug'ugxgp"dgco u0C"uwo o ct { "qh'vj g'eqo r ctkuqpu"dgw ggp"vj g'r qn{r tqr { ngpg" eqpetgvg"cpf "vj g'r qn{qnghkp"eqpetgvg"o cvgtkcni'r tqr gtvkgu'ku'r tqxkf gf "dgny 0

Vj g'eqo r tguukxg''untgpi y u''ctg''i kxgp''kp''cdng''70'Vj g''eqo r tguukxg''untgpi y u'hqt''yj g''r qn{r tqr {ngpg'' eqpetgyg''y gtg''eqpukuygpvn{'j ki j gt''yj cp''yj g''r qn{qnghkp''eqpetgyg''hqt''cm'hkxg''ur geko gp''ci gu0'Vj gtg'' ctg''qxgt'': ''ko gu''cu''o cp{'hkdgtu''kp''yj g''r qn{qnghkp''o kz''yj cp''kp''yj g''r qn{r tqr {ngpg''o kz0''T gr ncekpi "y ku''o wej ''eqpetgyg''kp''yj g''o kz.''y kyj ''hkdgt.''ecp''dg''c''eqpvtkdwkpi ''hcevqt''vq''yj g''nqy gt''eqo r tguukxg'' untgpi yj u0'Uqo g''qh''yj ku'f getgcug''kp''untgpi yj ''o c{''cnuq''dg''cwtkdwgf ''vq''c''nqy gt''y ke''tcvkq'**205: ''xu0'' 2063+0'Gxgp''yj qwi j ''yj g''eqo r tguukxg''untgpi yj u'hqt''yj g''r qn{qnghkp''o kz''y gtg''nqy gt.''dqyj ''o kzgu''o gv'' O pIF QV''ur gekhkecvkqpu0'Vj g''kpetgcugf ''hkdgt''eqpvgpv''cpf''j ki j gt''y ke''tcvkq''cnuq''tguwngf ''kp''c'' unki j vn{''nqy gt''gncurke''o qf wnwu''hqt''yj g''r qn{qnghkp''o kz'0'yj ku''ku''uj qy p''kp''cdng''80'Vj g''Rqkuuqpøu'' tcvkq'''nqt''qqy ''o kzgu'y cu''208; .''cu''uggp''kp''cdng''80'Kk'uj qwnf ''cnuq''dg''pqygf''yj cv'yj g''gncurke''o qf wnk'' cpf''Rqkuuqpøu''tcvkq''o gcuwtgf ''hqt''yj g''hdgt''tgkphqtegf ''eqpetgyg''ku''eqo r ctcdng''q''yj cv'qh'' eqpxgpvkqpcn'eqpetgyg0

Vcdng'9'uj qy u'hngzwtcn'utgpi y u'hqt''dgco u'ewtgf 'ceeqtf kpi ''\q'CUVO 'E530Vj g''y q''o kzgu'j cf'' eqo r ctcdng'hngzwtcn'utgpi y u0Cnj qwi j ''y g'hkdgt''j cu'nkwng'utgpi y ''kp''eqo r tguukqp.''kv'ku'o wej '' utqpi gt''kp''ygukqp0'Vj gtghqtg.''y g'kpetgcug''kp''hkdgt''eqpvgpv'hqt''y g''r q{mnghlp''o kz''f qgu''pqv'' uki pkhlecpvn(''tgf weg''y g'hngzwtcn'utgpi y .''cu'kk'f kf''y kyj ''y g''eqo r tguukxg''utgpi y 0'Vj g''urki j v'' tgf werkqp''kp''y g''hngzwtcn'utgpi y ''qh''y g''r qn{qnghlp''o kz''ku''o quv'nkngn(''f wg''r tgf qo kpcvgn(''vq''y g'' kpetgcug''kp''y le''tcvkq0'Dqyj ''o kzgu''j cxg''o qtg''y cp''uwhhlekgpv'utgpi y ''vq''o ggv'O p1F QVøu''utgpi y '' tgs wktgo gpvu0

Vj g'hrgzwtch'utgpi yi u'hqt''yi g''ur geko gpu''ewtgf ''ceeqtf kpi ''\q''CUVO 'E53''ctg''qxgt''47''r gtegpv'' i tgcvgt''yi g''utgpi yi u'hqt''yi g''ur geko gpu''ewtgf ''kp''yi g''hkgrf 0'Vj g''hrgzwtch'utgpi yi u'hqt''yi g''

ur gelo gpu'ewtgf 'lp''y g'hlgrif 'ctg'r tqxkf gf 'lp''vcdrg'90'K'ku'pqv'ergct'y j { 'y g'gctrkgt 'uxtgpi y u'hqt '' y g'r qn{qrghlp'eqpetgvg''ctg'uq'o wej ''nqy gt''y cp''y g''gctn{ 'uxtgpi y u'hqt''y g'r qn{r tqr {rgpg'eqpetgvg'' hqt''y g'hlgrif ''ewtgf ''ur gelo gpu0C'r quukldrg''gzr rcpcvlqp'hqt''y ku''o c{ ''dg''dgecwug''y g'y kpf 'j cf '' dry p''uqo g''qh'y g''drcpnrgvu''dcem'qp''y ku'r qtvlqp''qh'y g'y j ksgvqr r kpi = 'y gtgd{ ''gzr qukpi ''y g'' qxgtrc{ ''cpf ''r quukln[''uqo g''qh'y g'' qn{qrghlp'eqpetgvg''dgco u'vq'y kpf ''cpf ''y g''eqnf ''ckt0

Vj g"gzvgpukzg"o cvgtkcni'r tqr gtv["vgukpi "qp"y g"K; 6"r tqlgev'tgzgcrgf "y cv'y g"hkdgt tgkphqtegf" eqpetgvg"hqt "y gug"o kz "f guki pu'cpf "eqpzgpvkqpcni'eqpetgvg"j czg'uko krct "o cvgtkcni'r tqr gtv[" ej ctcevgtkuvkeu0Vj g"r qn[r tqr {ngpg"eqpetgvg"v[r kcm["uj qy gf"c"urki j w["j ki j gt"eqo r tguukzg" untgpi yi "cpf" "gruvke"o qf wnwu'eqo r ctgf "vq"yi g"r qn[qnghlp"eqpetgvg."o quv'nkngn["f wg"vq"f getgcugf" hkdgt "eqpvgpv'cpf" c"my gt"y ke"tcvkq0"Vj g"hrgzwtcni'untgpi yi u"hqt"yi g"wy q"o kzgu"y gtg"eqo r ctcdng0" Vj g"kphnvgpeg"qh'ewtkpi "qp"eqpetgvg"untgpi yi "y cu"cnvq"go r j cukl gf 0"Vj g"ur geko gpu"eqpvkpvqwun[" o qkuv'ewtgf" "kp"cp"gpxktqpo gpvcni'tqqo "gzj kdkvgf" "uki pkhkecpvn["j ki j gt"untgpi yi u"yi cp"yi qug"ewtgf" "kp" y g"hkgrf 0"Vj g"eqpetgvg"qxgtrc{"tgvckpgf" j gcv'cpf"o qkuvutg"o qtg"ghhkekgpvn["yi cp"yi g"hkgrf "ewtgf" uvu'ur geko gpu"dw"pqv'cu"y gmi'cu"yi g"ur geko gpu"ewtgf "kp"c"rcdqtcvqt{"gpxktqpo gpv."gur gekcm[" i kxgp"yi g"eqnf"hkgrf "eqpf kkqpu0"Vj gtghqtg."yi g"untgpi yi "qh"yi g"eqpetgvg"qxgtrc{"o quv'nkngn["hcmu" uqo gy j gtg"dgw ggp"yi g"untgpi yi "qh"yi g"hkgrf /ewtgf "dgco u"cpf"yi g"untgpi yi "qh"yi g"dgco u"ewtgf" ceeqtf kpi "\q"CUVO "E530

O cygtkchEj ctceygtk cylap'ah'Gzkwlpi 'Curj cny

Vj g'qr vło wo "342 1372" r gpgytcykqp"dkpf gt "eqpygpyliqt" y g"gzkurkpi "cur j cn/eqpetgyg" y cu'ugrgeygf" wukpi "y g'97/dmy "O ctuj cm'o kz "f guki p"o gy qf 0Vj g'uco g'o kz "f guki p"y cu'wugf "vq"eqpuntwev'c" uko kret "yguv'ugevkqp"cv'yj g"O p IT QCF "yguv'icekrk√0lfp" y cv'\yguv'ugevkqp." y g"r cxgo gpv'y cu'eqtgf" ko o gf kcygn "chygt "hkgrf" eqo r cevkqp." r tkqt "vq"cp{"tethke "mcf kpi u0T gukrkgpv'o qf wnwu"CUVO" F 6345+"ygo r gtcwtg "uwuegr vkdkrk√" (yguvkpi "y cu'r gthqto gf "qp" y g"ugr ctcvgf "rkiwu"qh" y g"hkgrf" eqtgu0' Vj g"tgukrkgpv'o qf wnwu"o gcuwtgf "hqt"gcej "rc{gt"ecp"dg"eqpukf gtgf "tgr tgugpwcvkxg"qh" y g"tgukrkgpv'' o qf wnwu"qh'y g"eqttgur qpf kpi "rc{gt"kp" y g"cur j cn/r cxgo gpv'y g"y j kgyqr r kpi "y cu"eqpuntweygf" qxgt0Vj g"o qf wrk'o gcuwtgf "kp" y g"eqo r cpkqp"ugevkqp"dgrqy "97"o o "*5"kp+"htqo "y g"gzkurkpi" r cxgo gpv'uwtrceg'y gtg"wugf "kp" y ku"uwf { "*6+0

Gegpgo le'Cpcr(uku

Cp"geqpqo ke"cpcn(uku"y cu"r gthqto gf "vq"f gvgto kpg"y g"geqpqo kecnhgcukdkkk("qh"y j kgvqr r kpi 0' Vj g"cpcn(uku"kpenvf gf "vj g"guvko cvgf "equv"qh"vj g"vguv"ugevkqpu"eqpuvt wevgf "cv"O p IT QCF "cpf" guvko cvgu"qh"y j cv'o qtg"v(r kecn'y j kgvqr r kpi "r tqlgevu"y qwrf "equv"ukpeg"y gtg"y gtg"ugxgtcnhcevqtu" y cv"kpetgcugf "vj g"equv"qh"vj g"vguv"ugevkqpu"cdqxg"y j cv"y qwrf "pqto cm("dg"cpvkekr cvgf 0'Hqt" gzco r rg. "vj g"r tqlgev"rgvkpi "y cu"kp" Lwpg"cpf "cy ctf gf "kp" Lwn(."ugxgtcnlo qpy u"chvgt"y g"o clqtkk("qh" y g"eqpetgvg"r cxkpi "r tqlgevu"hqt"3; ; 9"j cf "dggp"cy ctf gf 0'Vj ku"rcvg"rgvkpi kcy ctf "o quv"nkngn(" kpetgcugf "vj g"r tkegu"s wqvgf "eqo r ctgf "vq"y j cv"y qwrf "j cxg"dggp"qdugtxgf "y ky "cp"gctnkgt "rgvkpi "dgecwug"qh"y g"reemiqhhngzkdkkk("cxckrcdrg"vq"y g"dkf f kpi "eqpvtcevqtu"kp"uej gf wkpi "vj g" eqputvevkqp"ctqwpf "vj gkt"rcti gt"r cxkpi "r tqlgevu0'Vj g"r tqlgev'cnuq"tgs wktgf "vj g"wug"qh'c"urkr/hqto "r cxgt"y j kej "j cu"c"uki pkhecpvn("j ki j gt"o qdkrk cvkqp"equv'y j gp"eqo r ctgf "vq"qy gt"r cxkpi "gs wkr o gpv"uwej "cu"y g"erctg{"uetggf 0'T gs wktkpi "c"urkr/hqto "r cxgt"cnuq"ko kvgf "vj g"pwo dgt"qh" dkf f gtu"qp"y g"r tqlgev'vq"y q0

Vj g"equvl" gt"us wctg"o gygt "qh"gcej "vguvlugevkqp"ku"rkuvgf "kp"vcdrg": "cmpi "y kij "guvko cvgf "equvu"hqt" o qtg"v{r kecn'uo cm'r tqlgevu"*32.222"/"52.222"o 3"4+"cpf "v{r kecn'ucti gt"r tqlgevu"*@52.222"o 4+0 Vj g"guvko cvgf "equvu"kpenwf g'vj g'hqmqy kpi "cuuwo r vkqpu"cpf "cuuqekcvgf "gzr gpugu<

30°Vj g'equvu''qh'o qdktk cvkqp.''uvtkr kpi ''cpf ''Iqkpv'ugcrkpi ''ctg''r tqtcvgf ''vq''c''wpkv'equv'r gt us wctg''o gvgt0

- 40' C'rcti g'r tqlgev'ku'qh'uwhhelgpv'uk| g'\q'lwuwhi{ "y g''dvo g''cpf 'equv'tgs wktgf 'hqt''c'' eqpvtcevqt''\q''dtkpi 'kp''j ku'qy p''o qdkrg''eqpetgyg''r rcpv0'Vj ku'y qwrf 'ttgf weg''y g'' eqpetgyg''equv'htqo "&347''r gt''o 5"*equv'qh'eqpetgyg''y j gp''r wtej cugf 'htqo ''c'tgcf {/o kz'' eqo r cp{+'\q''& 2'r gt''o 50C''rcti gt''r tqlgev'y qwrf ''cnq''uki pkhecpvn('ttgf weg''y g'' o qdkrk| cvkqp''r tkeg''r gt''us wctg''o gygt0
- 50' Vj g'r qn(qrghkp'hkdgtu'y gtg'f qpcvgf 'hqt'y g'O pITQCF 'r tqlgev0Y j gp"guvko cvkpi "gzr gevgf 'equvu.''y g'r qn(qrghkp'eqpetgvg'equv'y cu'cuuwo gf ''vq'dg''&82022'r gt'o 5''o qtg'' y cp''y g''eqpetgvg'eqpvckpkpi 'r qn(r tqr {ngpg'hkdgtu0
- 60' Iqkpv'ugcnkpi 'y cu'gunko cvgf 'vq'equv'&20 2 r gt'hkpgcn'o gvgt'dcugf 'qp'c'uvcvgy kf g'' cxgtci g'r tkeg'htqo '3; ; 9'hqt'ugcnkpi 'c'47'o o 'f ggr 'cpf '8'o o 'y kf g'ukpi ng'ucy 'eww0' Iqkpv'ugcnkpi 'y cu'r gthqto gf 'wpf gt'c'uwr r ngo gpvcn'ci tggo gpv'cpf 'y cu'pqv'kpenwf gf '' cu'c'dkf 'kgo 'hqt'y g'O p Π qcf 'y j kgvqr r kpi 0

Ugxgtcniqdugtxcvkqpu'ecp'dg'o cf g'dcugf 'qp''y g'guvko cvgu'r tqxkf gf 'kp''vcdrg''. 0Eqo r ctkpi ''y g'equv'' qh'Egmi', 5''cpf '', 7''uj qy u''y g''cf f kkqpcniequv'qh''y g''r qn{qrghkp'hkdgtu'ku'uqo gy j cv'qhhugv'd{ ''y g'' ucxkpi u'kpewttgf 'y j gp'wukpi ''rcti gt''r cpgnluk gu'*304''o 'z'304''o 'z'304''o 'z'30''o 'z'30 ''o +'dgecwug''y g'' rcti gt''r cpgnu'tgs wktg''rguu'lqkpv'ucy kpi ''cpf ''ugcnkpi 0Vj g''tgf wevkqp''kp''equv'y j gp''wukpi ''rcti gt'' r cpgnu'ku''cnuq''uggp''y j gp''eqo r ctkpi ''y g''equv'qh'Egmi', 8.''; 9''cpf ''; 9d0'Vj g''f khrgtgpeg''dgw ggp''y g'' equv'qh''y g'5''o 'z''509/o '*32''hv'z''34/hv+'r cpgnu''kp''Egmi', 9d''cpf ''y g''30''o 'z''30 /o '*7''hv'z''8/hv+'r cpgnu'' kp''Egmi', 8''ku''cm quv''rcti g''gpqwi j ''vq''qhhugv'y g''cf f kkqpcniequv'qh'f qy gnu'kp''Egmi', 9d0'Vj g'' uki pkhlecpv'equv'xctkcvkqpu''dgw ggp''y g''qxgtrx{u'kpetgcugu'y g''ko r qtvcpeg''qh''nqmkpi ''cv'dqy' ''y g'' equv'qh''gcej ''f guki p''xctkcdrg''cpf ''y g''ghhgevkxgpguu''qh''y cv'xctkcdrg''qp''kpetgcukpi ''y g''ugtxkegcdkkw{'' rki'g''qh''y g''qxgtrx{0}

Opg/[gct'Rgthqto cpeg'Uwo o ct{

Gcej "vguv'egmij cu'dggp"o qpkqtgf "tgi wrctn(0F {pco ke'uvtckp'f cvc'y cu'eqmgevgf "kp'eqplwpevkqp" y kij 'hcmkpi 'y gki j v'f ghrgevqo gvgt "*HY F + 'vguvkpi "cv'ukz "f khigtgpv'vko gu'f wkpi 'y g'hktuv'{gct0'Vj g" HY F "f cvc'y cu'wugf "vq'o qpkqt" y g'uvkhipguu'qh'vj g'uvtwewtg'cv'f khigtgpv'mqecvkqpu'qh'vj g'r cpgn' y tqwi j qwv'y g"{gct0F kurtguu'uvtxg{u'y gtg'cnnq'r gthqto gf 0F cvc'eqmgevkqp"f cvgu'ctg'i kxgp'kp" vcdng"; "cpf "c'uwo o ct{"qh'vj g'vguv'tguwnu'ku'r tqxkf gf "dgnqy 0

HY F<u>'Vgukpi</u>

Vj g"ng{"vq"nqpi/ygto "r gthqto cpeg"qh"WVY u"ku"vq"o ckpvckp"c"i qqf "dqpf "dgy ggp"y g"qxgtm{"cpf" yi g"gzknkpi "cur j cn/r cxgo gpv'uq 'yi cv'yi g"y q"m {gtu"cev'cu"qpg"o qpqnkyi ke 'ugevkqp0"Kp"c 'hxm(" dqpf gf "eqpf kkqp."yi g"pgwtcn'czku"ecp"f tqr "f qy p"kp"yi g"cur j cn/m {gt"uq"yi g"eqpetgyg"qxgtm {"ku" eqo r ngvgn("kp"eqo r tguukqp0Cu"yi g"qxgtm {"dgi kpu"vq"f gdqpf ."vgpukng"uxtguu'y knif gxgmr "cv'yi g" dqwqo "qh"yi g"qxgtm {0Vj gug"uxtguugu'y knikpetgcug"cu"yi g"uxtgpi yi "qh"yi g"dqpf "f getgcugu"uq"yi g" nklg"qh"yi g"qxgtm {"y kniluj qtvgp" 5+0Ugg"hki wtg"60Vj g"uxkhhgt"yi g"cur j cn/m {gt "ku"tgmvkxg"vq"yi g" eqpetgyg"m {gt"y g"hxtyi gt"f qy p"yi g"pgwtcn'czku"y knift tqr 0Vj g"wug"qh"uj qtv!qkpv'ur cekpi "j gm u" tgf weg"dgpf kpi "uxtguugu"kp"WVY u"dgecwug"ewtnkpi "cpf"y ctr kpi "uxtguu"ctg"tgf wegf "cpf"yi g"umcd" y knivgf"y ghngev'f qy py ctf "cu"qr r qug"vq"dgpf kpi "wpf gt"cr r nkgf"y j ggnnqcf u"\$5+0Ugg"hki wtg'70

 $\label{eq:model} \begin{tabular}{ll} Mpqy &pi "iy g"intckpu"cv'dqiy "iy g"iqr "cpf" dqwqo "qh'iy g"intcd"o cngu"kv'r quukdng"iq"guwlo cvg"iy g" f gi tgg"qh'idqpf kpi "dgwy ggp"y g"cur j cnv'cpf "eqpetgyg0"Vj g"o ci pkwf g"qh'iy g"intckpu"cniq"r tqxkf gu" cp"kpf keckqp"qh'iy g"gzr gevgf "hkig"qh'iy g"qxgtnc{0'HY F "vguwkpi "y cu"r gthqto gf "f ktgew("cdqxg"gcej "f {pco ke"untckp"ugpuqt"kp"gcej "vguv'egnt0"Vj gug"ugpuqtu"ctg"mecvgf "cv'ukz"f kthgtgpv'ctgcu'y kyi kp"yi g" r cpgrt0'Gcej "mecvkqp"j cu"qpg"ugpuqt "mecvgf "cv'iy g"dqwqo "qh'iy g"qxgtnc{"cpf "qpg"ugpuqt"47"o o "*3" kp+'htqo "y g"vqr "qh'iy g"qxgtnc{0'Ugg"hki wtg"50'HY F "vguwkpi "y cu"r gthqto gf "cv'5"f kthgtgpv'mqcf "o ci pkwf gu"]49"nP "*8"nkr u+"62"nP "*; "nkr u+"cpf "89"nP "*37"nkr u+_"y kyi "y tgg"f tqr u"r gt"nqcf 0'Vj g" untckp"cpcn(uku"dgnqy "ku"dcugf "qp"yj g"cxgtci g"untckp"liqt"yj g"yj tgg"62/nP "*; /nkr +'mqcf ut0$

Cm'untckpu'o gcuntgf "cv'iy g"dqvqo "qhi'y g"eqpetgvg"uncd"dgvy ggp"P qxgo dgt"3; ; 9"cpf "O ctej "3; ; : " kp"vj g'97/o o "*5/kp+"vguv'ugevkqpu"y gtg"dgrqy "- 32"o ketquvtckp"*vgpukqp"ku"r qukxkxg+0O quv'uvtckpu" y gtg'kp''eqortguukqp0'Vj ku'kpfkecvgu''vj cv''vj gtg'ku''c''i qqf''dqpf''dgyy ggp''vj g''vy q''nc{gtu0'Uvtckpu''cv' yj g"dqvqo "qh"yj g"urcd"hqt "yj g"322/o o "*6/kp+"\guv'ugevkqp."o gcuvt.gf "y kyj kp"yj ku'uco g"\ko g"r gtkqf." y gtg"xgt{"nqy "dw\'unkij vn{"j kij gt"vjcp"vjg"uvtckpu"o gcuwtgf "kp"vjg"97/o o "*5/kp+"\guv'ugevkqpu0Cm" qh'y g'uxtckpu'o gcuxtgf "cv'y g'dqvqo "qh'y g'qxgtrc{ "kp''y g'372/o o "*8/kp+'vguv'ugevkqpu'y gtg'kp" vgpukqp0O quv'qh'yj g'untckpu'o gcuwtgf "cv'yj g'\qr "qh'yj g'uncd'y gtg'i tgcvgt'yj cp'yj qug'o gcuwtgf "cv' y g"dqwqo "qh"y g"urcd"kpf keckipi "y cv"y g"pgwtcn"czku"f kf "uj khv"f qy p"dgrqy "o kf/f gr y "qh"y g" eqpetgyg'rc{gt0Vj g'kpetgcugf 'uvkhhpguu'f q'\q'y g'cf f kkqpcn'y kempguu'qh'y g'qxgtrc{"r tgxgpygf 'y g' pgwtcn'czku'htqo 'uj khkpi 'f qy p'hktyj gt 'cu'y cu'uggp'kp''y g'322/o o '*6/kp+''cpf 'gxgp'o qtg'uq'kp''y g' 97/o o "5/kp+"qxgtrc{u0Cm'lvtckpu"o gcuwtgf "cv'y g"dqwqo "qh'y g"lurcd"dgy ggp"P qxgo dgt"3;;9" cpf 'O ctej '3; ; : 'kp''y
i g'372/o o '*8/kp+'ugevkqpu''y gtg'hguu''y cp''- 42''o ketqu
vtckp'' g'uvtckp'' o gcuwtgo gpvu'lipf kecvg''y cv'd { 'lipetgculipi ''y g'eqpetgvg''y kempguu''y g''uvtclipu''cv'y g''dqwqo ''qhi'y g'' eqpetgyg'ecp'kpetgcug0'Vj ku'ku'dgecwug'yj g'hrgzwtcrltki kf kx{ "qh'yj g'qxgtrc{ 'kpetgcugu'ecwukpi 'yj g' pgwtcn'czku'\q'uj khv'wry ctf 0'Gxgp'\j qwi j 'kpetgcukpi '\j g'\j kempguu'\qh'\j g'eqpetgvg'y km'kpetgcug'' yj g'mcf "ectt { kpi "ecr cekx{ "qhi'yj g'qxgtm { 'kx'cnnq'uj khur'yj g'pgwtcn'czku'wr y ctf 'hqtekpi "c'mti gt" rqtvkqp"qh"vjg"nqcf"vq"dg"ecttkgf"d{"vjg"qxgtnc{"cpf"nguu"d{"vjg"curjcnn0Vjgtghqtg."kpetgcukpi"vjg" y kempguu'qh'y g''qxgtrc{"o c{"pqv'cry c{u'kpetgcug'y g''ugtxkegcdkrk/{"rklig0'Uko krct'hkpf kpi u''y gtg" hqwpf 'kp'c'uwf { 'r gthqto gf 'd { 'O cem'gv'cn0*7+'wukpi 'hkpkg'grgo gpv'cpcn(uku0

Utckpu'o gcuxtgf "cv'y g"dqwqo "qh'y g'urcd"y gtg"r mwgf "ci ckpuv'ceewo wrcvgf "GUCNu'hqt "gcej "vguv" meckipp0Ceewo wrcvgf 'GUCNu'y gtg"ecnewrcvgf 'hqt"cm'yguv'ugevkippu'cuuwo kipi "c'372/o o "*8/kp+" rqtvncpf "ego gpv"eqpetgvg"uncd"cpf "c"\gto kpcn"ugtxkegcdkrkv{ "qh"4070Hki wtg"8"uj qy u"uvtckpu" o gcuwt gf "cv'o kf r cpgn'cf lcegpv'vq" y g'hcpg luj qwrf gt "lqkpv'hqt" y g'vguv'ugevkqp y ky '97" o o "*5" kp+" vj kemi304"o "z"304/o "%6'ln/z"6/ln/+'r cpgn:0Hki wtg'8'kpf kecvgu'vj cv'vj gtg'ku'pqv'c'uvtqpi 'tgrcvkqpuj kr" dgw ggp"kpetgcukpi "uvtckpu"cpf "ceewo wrzyf "GUCNu"cv"vj ku"uvci g"kp"vj g"nkig"qh"vj g"qxgtrr{0C" uvtopi gt"tgrcvkopuj kr "y cu"howpf "dgvy ggp"vj g"uvkhipguu"qh"vj g"cur j cn/'cpf "vj g"o gcuwtgf "eopetgvg" untckpu0'Ugg'hki wtg'90Cu'vgo r gtcwrtgu'kpetgcugf "cpf "vj g"tgukrkgpv'o qf wnwu'qh'vj g"cur j cn/ f getgcugf ."eqpetgvg"uvtckpu"kpetgcugf 0'Kpetgcugu"kp"yj g"tgukrkgpv"o qf wrwu"qh"yj g"cur j crw'kpetgcugu" yj g"hrgzwtcri'tki kfkx{ "qhi'cur j cru'rc{gt"tgrcvkxg"\q"\j cv'qhi'yj g"eqpetgvg"qxgtrc{"ecwukpi "\j g"pgwxtcri" czku"\q"uj khv"f qy py ctf "cpf "uxtckpu"cv"yj g"dqvvqo "qh"yj g"eqpetgvg"\q"f getgcug0Vj g"uco g"\tgpf "y cu" rtgugpv'cv'cm'\guv'nqec\kqpu'hqt'\j g'97/o o "*5/kp+"cpf "322/o o "*6/kp+"qxgtnc{u0'Vj ku'\tgpf" crrgctgf "\q"dg"uxtqpi gt"hqt"\j g"\guv'uge\kqp"y kj "97"o o "\5"kp+"\j keni304"o "z"304/o "\5"kp/6"hv'z"6/hv+" r cpgnı'y j gp'eqo r ctgf ''\q''yj g''yj kengt ''qxgtnc{u0\Qpg'tgcuqp'kı'kdecwug'kv'kı'o qtg'fkhkewn\'\q'' qxgteqo g'yi g'kpetgcugf 'hrgzwtcn'tki kf kk{ "qh'c''yi kengt'eqpetgvg'qxgtnc{ 'd{ 'kpetgcukpi 'vj g'uvkhhpguu'' qh'vj g'cur j cn/ukpeg'vj g'vj kempguu'qh'c'rc{gt'j cu'c'ewdgf 'chigev'qp'vj g'hrgzwtcn'tki kf kv{ 'wprkng'vj g' grouse of wasu0Ugg "gs weskqp"3" *8+0Cmq. "vj g"r cpgnif gargewif qy py ctf "o qtg "gcukn("wpf gt "cp" crrnkgf "mqcf" y j gp"qxgtnc { "ku" y kp"cpf" y g"r cpgnu"ctg" uo cm0" V j g"o ci pkwf g"qh" y g"uvtckpu" o gcuwtgf 'kp'372/o o '*8/kp+'qxgtrc{u'\gpf gf '\q'dg'f gr gpf gpv'qp'\j g'pwo dgt'qh'GUCNu'' ceewo wrcvgf "cu"y gm"cu"yj g"uvkhhpguu"qh"yj g"cur j cno0Ugg"hki wtg": "cpf"; 0

$$F1 \frac{Gj^5}{12(1-\mu^2)}$$
 Gs wesledp '30*8+

F"?"Hrgzwt crit ki kf ks{
G"? 'O qf wrwu'qli'grc wkeks{"
j "?''Vj kenpguu'qfirc { gt"
%a' 'Rquukqpøu't c skq

Cm'qh''y g'uvtckpu''o gcuwt gf ''ct g'uvkm't grcvkx gn(''nqy ''chwgt ''qpg" { gct ''cpf ''972.222' GUC Nu0C''o qt g''kp/f gr y ''eqo r ctkuqp''dgwy ggp''vguv'ugevkqpu''ecp''dg''o cf g''chwgt ''o qt g''xgj keng''nqcf u''ct g''cr r rkgf ''cpf ''y g'' ugevkqpu''dgi kp''vq''f gygtkqtcvg0

F kust guu'Ust xg{

F kmt guu'umt xg{u'y gtg'r gthqto gf "qp"y g''gun'uge-kqpu'cv'ukz "f khlgt gpv''ko gu'f wtlpi "y g''htun'{gct" hqmy kpi "eqpunt we-kqp0'Vj g''htun'etcemu'y gtg''hqwpf "kp''Lwpg''qh'3; ; 90'Vcdrg''32''uwo o ctkl gu'y g'' tguwmu'qh'y g''f kmt guu'umt xg{u0'C v'y ku''ko g."pq''etcemu''ctg''r tgugpv'lp"y g''372/o o "%8/kp+"qxgtm{u0' O qun'qh'y g''eqtpgt ''dtgcmu''kp"y g''qy gt ''gun'egmu''qeewttgf ''dgw ggp''O ctej ''cpf ''Lwpg''qh'3; ; 90'Vj ku'' eqwrf ''dg''y g''tguwm''qh'j ki j ''pgi cxkxg''ygo r gtcwtg''i tcf kgpwi'']20''E leo "%505''Hlkp+_''yj cx'y gtg'' o gcuwtgf ''kp''O c{ ''3; ; 90'Eqtpgtu''qh'y g''urcd''ewtn'wr y ctf ''kp'y g''r tgugpeg''qh'c''pgi cxkxg''i tcf kgpv'' y gtgd{ ''tgf wekpi ''y g''urr qtv'kp''y gug''ctgcu0'Vj ku''kpetgcugu''y g''r qypvkcn'hqt''etcemkpi 'y j gp''y gug'' r ctxkcm{ ''uwr r qtvgf ''ctgcu''ctg''nqcf gf 0O qun'qh'y g''tcpuxgtug''etcemu''y gtg''hqwpf ''kp''Lcpwct{ ''3; ; ; 0' Cm'qh'y g''etcemu''hqwpf ''f wtkpi ''y ku''ko g''y gtg''tghrgevkqp''etcemu''y cv'qtki kpcvgf ''kp''y g''gzkuxpi '' cur' j cm''cpf ''tghrgevgf ''wr ''kpvq''y g''qxgtmc{0'Vj ku''etcemkpi ''o quv'thngn{ ''qeewttgf ''y j gp''r cxgo gpv'' yo r gtcwtgu''f tqr r gf ''dgny ''647", E''*35", H+"f wtkpi ''y g''htun'y ggm'qh'Lcpwct{ ''3; ; ; 0

Chygt"37"o qpy u "xgt { "rkwrg"etcenkpi "j cu'qeewttgf "cpf "cm'ctg"nqy "ugxgtkx{ "etcemu0Vj g"97/o o "5/kp+"vguv'ugevkqp"y kij "304"o "z"304/o "%6"hv'z "6/hv+"r cpgnu"j cu'yi g"rcti guv'co qwpv'qh'etcenkpi 0'K'ku''vqq" gctn{ "vq"f gygto kpg"kh'yi g"kpetgcug"kp"etcenkpi "ku'uki pkhecpv'ukpeg"xgt { "rkwrg"etcenkpi "j cu'qeewttgf" kp"cp{ "qh'yi g"ugevkqpu0Qxgt"92"r gtegpv'qh'yi g"etcenkpi "ku'i tqwr gf "kp"tgi kqpu"cdqxg"vtcpuxgtug" etcenu'kp"yi g"cur j cn0Vj ku'uvtguugu'yi g"ko r qtvcpeg"qh'pqv'r rcekpi "dqpf gf "qxgtrr{u'qp"cur j cnv'' r cxgo gpvu'yi cv'j cxg"cp"gzeguukxg"co qwpv'qh'f gygtkqtcvgf "vtcpuxgtug"etcenu0

Uwo o ct{

Ukz"y j kgyqr r kpi "ygw'ugevkqpu"y gtg"eqpuntweyf "cv'y g"O pTQCF "ygw'licektky (OHkdgt "tgkplqtegf" eqpetgyg"y cu'wugf "yq"eqpuntwev'y g"y j kgyqr r kpi "ugevkqpuO'Vy q"f khigtgpv'y r gu'qh'hkdgtu'y gtg" kpyguki cvgf ."r qn{ qrghkp"cpf "r qn{ r tqr { rgpg"hkdgtuODqy "y{ r gu"qh'hkdgt" tqf wegf "eqpetgyg"j cxkpi " o cvgtkcn'r tqr gtvkgu"eqo r ctcdrg"yq"y cv'qh'eqpxgpvkqpcn'eqpetgygO'Vj gug"yguv'ugevkqpu'y gtg" kpuntwo gpygf "y kyj "ygo r gtcwtg."o qkuwtg"cpf "ucvke"cpf "f {pco ke"untckp"ugpuqtuOHY F "ygurkpi "cpf " f kuntguu'untxg{u'y gtg"r gthqto gf "yj tqwi j qw'yj g"{gctOT guwnu'htqo "yj g"f {pco ke"untckp" o gcuwtgo gpw"kpf kecyg"y cv'c"i qqf "dqpf "y cu"qdvckpgf "dgw ggp"yj g"cur j cn/cpf "eqpetgyg"rc{gtuOKi' y cu"cnq"qdugtxgf "yj cv'yj g"qxgtrc{"yj kenpguu'cpf "yj g"cur j cn/unkhipguu'uki pkhlecpyn{"chigev'yj g" untckpu'kp"yj g"qxgtrc{"dgecwug"qh'yj g'kngtrc{"y krilpqv'cny c{u"tguwnv'kp"nqy gt"untckpuOCm quv'cm' qh'yj g"o gcuwtgf "untckpu'y gtg"xgt{"ny "cpf"yj gtg"ctg"pq"etcemi'r tgugpv'kp"yj g"372/o o "8/kp+'yguv' ugevkqpu'cpf "xgt{"hxwrg"etcemkpi "kp"yj g"322"cpf"97/o o "%6"cpf"5/kp+'yguv'ugevkqpu'chrgt"37"o qpy u" qh'ugtxkeg"cpf "972.222"GUCNuOKk'ku'unkm'yqq"gctn("vq"kf gpykh{"cp"qr vko wo "qxgtrc{"f guki p0

TCHCTCPEGU

- 30' Mqt| krkwu.IOVJ/38; "cpf" Y gdungt "UOKpvgtugevkqp" Wint c/vj kp" Y j kigvqr r kpi "Eqpunt wevkqp" Tgxkgy .EqpvcevTgr qtv.Op IF QVRj {ukecnTgugctej Hkgrf RtqlgevWr f cvgcpf Hkrg" F qewo gpvcvkqp.3; ; 70
- 40' Mqt| krkwu.LO*VJ /38; "cpf"Y gduvgt"UoNfovgt ugevkqp"Wnxt c/vj kp"Y j kvgvqr r kpi "Rgt hqt o cpeg"*Tgxkgy .EqpvcevTgr qtv.O p IF QVRj {ukecnTgugctej Hkgrf RtqlgevWr f cvgcpf Hkrg"

 F qewo gpvckqp.3; ; 80
- 50' O cemLOY OEj wpi Nwpi Y w UUVcttcpf VOT glckõO qf grF gxgrqr o gpvcpf Kovgt ko "F guki pRtqegf wtgI wkf grkpgulqt Whxtc/yi kpY j kgvqr r kpi Rcxgo gpvu.ö*Uzvj "Kovgt pc vkqpc ri"***Rwtf wg"Eqpligt gpeg"qp"Eqpet gvg"Rcxgo gpv"F guki p"cpf"O cvgt kcnu"liqt "J ki j "Rgt liqt o cpeg.XqrO"

 3.Y guvNchc{gwg.KP.PqxOS; ; 90
- 60' Uvtqwr/I ctf lpgt.O (cpf F (GOP gy eqo d. Kpxguski cvkqp"qhlJ qv'O kz ''Cur j cnv'O kz wst gu''c v'' Op IT QCF. Tgr qt vO P IT E/; 9 128.O kppguqvcF gr ctvo gpvqhVtcpur qt vcvkqp.Uv(RcwnO P. "Hgd(B; ; 90
- 70' O cemIOY ONOY (Eqrecopt IORO) qj ugp.õCpcn(skecrEqpulf gtcslqpulqtVj kpEqpetgsg" Qxgtnc{uqpCur j cnxöVtcpur qt vcslqp"Tgugctej "Tgeqtf"35:::"VTD.P cslqpcnlTgugctej "EqwpelnY cuj kpi vqp.F(E03;; 40
- 80' [qf gt.GOOcpf O OY OY ke| cm"Rt kpekr ngu"qhRcxgo gpv"F guki p.Ugeqpf Gf kkqp.Iqj pY krg{" cpf Uqpu.Kpe0P gy [qtmP [.3; 970

CEMPOY NGFI O GPVU

FRENCKO GT

Vj g"eqpvgpvu"qh"vj ku"tgr qtv"tghrgev"vj g"xkgy u"qh"vj g"cwj qtu"y j q"ctg"tgur qpukdrg"hqt"vj g"hcevu"cpf "ceewtce{"qh"vj g"f cvc"r tgugpvgf "j gtgkp0"Vj g"eqpvgpvu"f q"pqv"pgeguvctkn("tghrgev"vj g"xkgy u"qt" r qrkekgu"qh"vj g"O kppguqvc"F gr ctvo gpv"qh"Vtcpur qtvcvkqp0"Vj ku"tgr qtv"f qgu"pqv"eqpuvkvwg"c" uvcpf ctf ."ur gekhecvkqp"qt"tgi wrcvkqpu0

VCDNG'30'Uwo o ct { ''qh'O p II QCF ''y j kgrqrrkpi ''rguv'ugerkqpu0

Vguv'EgntF guet kr skap	Ugpuqt	Pq0qHUgpuqtu
Egni; 5<	F { pco ke 'Utckp	54
3220 o "ó"304"o "z"304/o "Repgnu	F {pcoke 'Curjcn' Hqkn' Utckp' I cig	4
*6'kp''6''6'hv'z''6/hv+	Uvcvke "Uvtckp	:
Rqn{rtqr {ngpg'Hkdgtu	Vj gto qeqwr rg	36
	Oqkuwtg	34
Egni; 6<	F {pco ke''Utckp	54
97"o o "ó"304"o "z"304/o "Rcpgnı"		
*5'kp''6'6'hv'z''6/hv+		
Rqn{rtqr{ngpg'Hkdgtu		
Egni; 7<	F {pco ke"Utckp	54
97o o "6"307"o "z"30 "o "Repgnı	F {pcoke 'Curjcn' Hqkn' Utckp' I cig	4
*5'kp''6'7'hv'z'8'hv+	Ucvle 'Utclp	:
Rqn(qnghkp"Hkdgtu	Vj gto qeqwr rg	34
h 1	Oqkuwtg	34
Egni; 8<	F {pco ke''Utckp	54
372"o o "ó"307"o "z"30 /o "Repgnı"		
*8'kp''6'7'hv'z'8/hv+		
Rqn{rtqr{ngpg'Hkdgtu		
Egni; 9<	F { pco ke''Utckp	54
372"o o "ó"5"o "z"509/o "Repgnı	F{pcoke'Curjcn/Hqkn'Utckp'Icig	4
*8'kp''6'32'hv''z''34/hv+	Ucvle 'Utclp	:
Rqn(rtqr{ngpg'Hkdgtu	Vj gto qeqwr rg	38
	O qkuwt g	34
Egni; 9d<		
372"o o "ó"5"o 'z"509/o "Repgni"	/P qpg/	<u>a</u>
*8'kp'6'32'hv'z'34/hv+		
Rqn(rtqr {ngpg'Hkdgtu''		
47o o 'z'5: 3o o 'F qy gnı		

Vqvcn 48:

VCDNG'40Eqpet gvg'o cvgt kcnluqwt egu'lligt 'Op ITQCF' 'qxgt rc {u0

F. co. cmv	Lames /'D cuan'Elst ''C
Ego gpv	Jqmpco/'Ocuqp'Ekx{.'KC
Encuu'E'Hn('Cuj	Pqpg
Hlpg'Ci i tgi cvg	Dct vqp/Quugq="Rk/P q0349225
Eqctug'Ci i tgi cvg" *3; 'b o 'b kpwu+	Dct vqp/Quugq="Rkv"P q0349225
Eqctug'Ciitgicvg" *32'oo'okpwu+	Dct vqp/Quugq="Rkx"P q0349225
Rqn{rtqr{ngpg'Hkdgtu	<u>Hkdgt o guj</u>
Rqr(qrghlp'Hldgt u	<u>50</u>
Clt 'Gpvt clpgt	Eqpej go /Eqpej go 'Ckt
Y cvgt 'Tgf wegt	Eqpej go /Rqn[j ggf/P

VCDNG"50Eqpetgvg"eqctug"cpf 'lkpg"ci i tgi cvg'i tcf cvkqpu'lqt"OpITQCF "qxgtrc{u0}

EQWTUG'CI I TGI CVG			HIP G'CI I TGI CVG		
	Rgt egpv'Rc udpi			Rgt egp v'Rc uulp i	
Ukgxg'Uk∤g	EC/72	EC/: 2	<u>Ukgxg'Uk∤g</u>	НС	
73'b o '*4'kp+			; 07'b o '*20597'kp+	322	
5: 'b o '*307'kp+			6097'b o '*Pq06+	322	
54'b o '*3047'kp+			4058'6 o '*P q0! +	; 4	
47'b o '*3'kp+	322		308: 'b o '*P q038+	94	
3; 'b o '*207'kp+	;9		822'%o '*P q052+	6:	
38'6 o '*20847'lp+			522'% '*P q072+	3;	
35'b o '*207'kp+			372'%o '*Pq0322+	6	
;07'b o '*20597'kp+	66	322	97'% '*Pq0422+		
6097'b o '*Pq06+	7	82	<u>H00 0</u>	4087	

VCDNG'60Cu/rmegf "eqpet gvg"o kz "rt qr qt vkqpu."cv'\j g"O pITQCF"t gugctej "ulvg0

	Eqpetgyg'y kj " Rqn{rtqr{ngpg'Hkdgtu	Eqpetgyg'y ky " Rqr(qrgHp" Hldgtu
Y cvgt 1Ego gpvlskqwu'Tcvkq	205:	2063
Ego gpv.'hi 1o ⁵ '*ndul{ f ⁵ +	5: 8'*872+	5: 8'*872+
Encur'E'Hr('Cuj.'hi 10 5'*rdul(f5+	2	2
Hopg'Ci i tgi cvg.'hi lo 5'*rdul{ f 5+	926'*33: 9+	986'*34: 9+
EC'*3; 'b o 'b lpwu+. 'hi lo 5'*ndul{ f 5+	; 6; '*3822+	:;2'*3722+
EC'*32'6 o '6 lpwu+.'hi lo 5'*ndul{ f 5+	386'*499+	386'*499+
Hedgt 'Eqpvgpv.'hi 10 5'*rdul{ f 5+	4'*5+	37'*47+
O gcuwt gf 'Ckt."	7097	904
Ogcuwtgf'Unwor.'oo'%lp0⊬	<u>87'*407+</u>	72'*4+

VCDNG'70Eqo rt guukxg'lat gpi vj u'l'qt ''ur geko gpu'ewt gf ''ceeqtf kpi ''\q'CUVO 'E530

	Eqpetgvg'y kj " Rqu{rtqr{rgpg'Hkdgtu" ORc'\ruk+	Eqpet gvg'y kj " Rqr <mark>(qrglip 'Hldg</mark> t u" ORc'"ruk+
3/Fc{	350 '*4222+	3302'*3822+
5/Fc{	480, '*5; 22+	4212*4; 22+
9/Fc{	5503'*6: 22+	4; 02'*6422+
36/Fc{	590, '*7722+	5503'*6: 22+
4:/Fc{	<u>6403'%8322+</u>	5807'*7522+

VCDNG'80<u>Grcuske"o qf wwwi'cpf "Rqkuuqpøu't cskq'hqt 'ur geko g</u>pu'ewt gf "ceeqtf kpi '\q'CUVO 'E530

	GNCUVIE'O	RQHUQP	ØUT CVKQ	
	Eqpetgyg'y kyj " Rqn{rtqr{ngpg'Hkdgtu" ORc"*ruk+	{rtqr{ngpg'Hldgtu' Rqn{qngllp'Hldgtu' R		Eqpet gvg'y koj " Rqr(qrghlp" Hldgt u
9/Fc{	53.248'*607'z'32 ⁸ +	4; .869'*605'z'32 ⁸ +	203;	203;
4:/Fc{	55.2; 6'\\$60 '\z'32\8+	52.559'\(\frac{606'\z'32\geq}{2}\pm\)	203;	203;

VCDNG'90'Higzwt crllat gpi yi u'hqt 'lur geko gpu'ewt gf 'kp'\j g'lkgrf ''cpf ''ceeqtf kpi ''\q'CUVO 'E530

	EWIGF 'CEEQTF PPI 'VQ'CUVO 'E53		EWIGF 'tP' 'VJ G'HIGNF	
	Eqpetgvg'y kyj " Rqn{rtqr{ngpg" Hkdgtu ORc'*ruk+	Eqpetgvg'y ky " Rqn qrgHp" Hldgt u ORc'' ruk+	Eqpetgvg'y kyj " Rqn{rtqr{ngpg" Hldgtu ORc"\ruk+	Eqpetgvg'y kj " Rqn(qrgHp" Hldgtu ORc'*ruk+
6/Fc{	703'*972+	608'*892+	50, '*792+	502'*662+
9/Fc{	70, '*: 72+	70 '*: 62+	5%'*742+	504'*682+
4:/Fc{			605''\842+	605'*852+

VCDNG": O'Equv'uno o ct { "qh'qxgtrc { "f guki pu"eqpunt wevgf "cv'\j g"O p IT QCF "ukvg0"

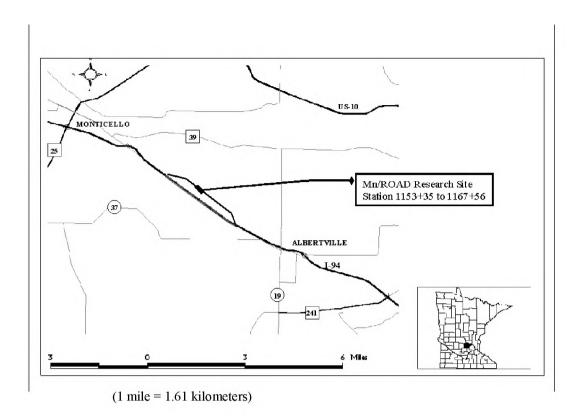
Ouet in UE out in	Equo'qh' Op II QCF" WVY 'Vguo' Ugevkqpu' *rgt 'b ⁴ +	Gusto cvgf 'Equv *Uo cnlRt qlgev<' 32.222/52.222'b ⁴ + *r gt 'b ⁴ +	Gudo cvgf 'Equo' *Ncti g'Rtqlgev<' ©52.222'b ⁴ +" *rgt'b ⁴ +
Qxgt nc {'F guli p	0	9520.2	0460.2
Egni; 5<	<i>&</i> 64035	&52Q 2	&460, 2
3220 o "6"304"o "z"304"o "Repgnu"			
*6'kp'6'6'hv'z'6'hv+			
Rqn(rtqr {ngpg'Hkdgtu	<i>&</i> 5807:	&490 2	&430 2
Egni; 6< 97"o o "6"304"o "z"304"o "Repgni"	∞80/:	0490, 2	∞ 430, 2
97 0 0 0 3 4 0 2 3 4 0 1			
Rqn(rtqr{ngpg'Hkdgtu			
Egni; 7<	<i>&</i> 5: 088	&53Q:	&46O:
970 o "6"307"o "z"30 "o "Repgni"	& . w o	6 6 6 6 6 6 6 6 6 6	æroo.
*5'kp'6'7'hv'z'8'hv+			
Rqn(qnghkp'Hkdgtu			
Egni; 8<	&6: Q 2	<i>&</i> 5509:	&4; 04:
372"o o "6"307"o "z"30 "o "Repgni"	55. 22		55. , 5
*8'kp'6'7'hv'z'8'hv+			
Rqn{rtqr{ngpg'Hkdgtu			
Egni; 9<	<i>&</i> 68058	<i>&</i> 53072	&48062
372"o o "6"5"o "z"509"o "Repgni"			
*8'kp''6''32'hv'z''34'hv+			
Rqn{rtqr {ngpg'Hkdgtu			9
Egnt; 9d<	&6; O58	<i>&</i> 560 2	&4; 9 2
372"o o "ó"5"o 'z'50"o 'Repgnı"			
*8'lp'6'32'hv'z'34'hv+			
Rqn{rtqr{ngpg'Hkdgtu			
Fqy gnu'*5: 3o o 'hqpi = f kc0+47o o +			

VCDNG"; 0F cvc "eqngevkqp" f cvgu" liqt "vj g" lkt uv" { gct "liqnqy kpi "eqpust wevkqp0

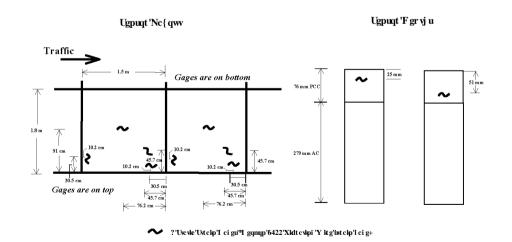
	F c w 'Eqngevlqp 'Rgt lqf					
V{rg'qhFcw'Eqngevkqp	3 4 5 6 7 8					8
HY F'cpf'Untckp'Feve	P qx0'∺; 9	F ge0' :; 9	Hgd0'∺; :	O ct0' :; ;:	Lwpg"∺; :	Qev0' :; :
Flunt gun'Uwt xg{	P qx0'∺; 9	Hgd0'∺; 9	O ct0' :; ;:	Lwpg"∺; :	Cwi 0'∺; :	Qev0'∺; :

VCDNG'320'Uno o ct { ''qlif knt guu'int xg{ u0

O qp y	P q0\qRcpgni' Et cengf	P q0\q\text{kEqtpgt"} Dtgcmi	PqOqliVtcpuxgtug" Etcemu
Egnn'; 5			
Hgd03;;:	2	2	2
Lwpg'3;;:	8	6	5
Qev03;;:	3	3	2
Pqx03;;:	4	3	3
Lcp03;;;	3	2	4
Vqw n'*' +	<u>404''</u>	<u>365''</u>	365"
Egnn'; 6			
Hgd03;;:	2	2	2
Lwpg'3;;:	36	35	6
Qev03;;:	6	6	2
Pqx03;;:	4	3	2
Lcp03;;;	8	3	8
Vqw n'*' +	709''	604''	404''
Egnn';7			
Hgd03;;:	2	2	2
Lwpg'3;;:	5	5	2
Qev03;;:	2	2	2
P qx03; ; :	2	2	2
Lcp03;;;	3	2	3
Vqw n*' +	308"	305"	266''

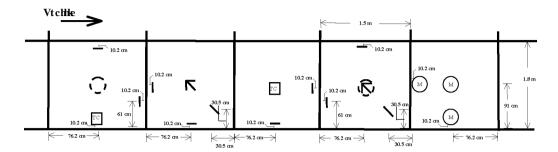


HM WTG'30Ngecvkqp"qh'OpITQCF"\guv'lcekrk\{0



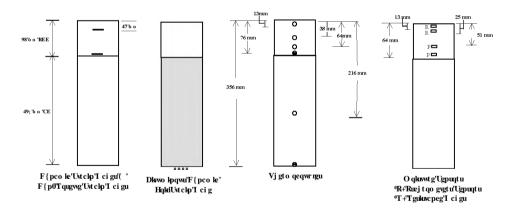
HM WTG'40V{rkechlocke"latckp"ugpuqt"rc{qwwlqt'30"'o 'z'30/o "*7"hvz'8/hv+rcpgnv0

V{r lecalUgpuqt 'Nc{qwilqt 'Enlo cyle'cpf 'F{pco le'Uxtclp'Ugpuqtu



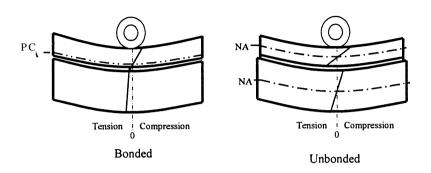
- ?'F{pco ke'Uxtckp'I ci gu'*Vqn(q'UqnmkF{pco ke'Uxtckp'I ci g+
- $\stackrel{\textstyle \stackrel{\textstyle \frown}{\textstyle \sim}}{} ?'F\{pco\ ke'Tqugwg'Utckp'I\ ci\ gut^*Vqn(q'UqnmkF\{pco\ ke'Tqugwg'Utckp'I\ ci\ g+1\})\}$
- ? ? TgvtqHsvgf 'Dkwo lpqwif {pco le'HqkiUttclp'I ci g'*DNJ 'HqkiUttclp'I ci g+
- O qkuwtg'I ci gu''Y gueqt 'UqkiRu(ej tqo gygt/J {i tqo gygt 'O qkuwtg'Ugpuqtu'cpf 'GNG'Tgukucpeg'O qkuwtg'Ugpuqtu+
- ?'Vj gto qeqwrıg'*V{rg/V'Vj gto qeqwrıg'Y ktg+

V{rlecnFgryj u'liqt'Enlo cyle'cpf'F{pcole'Uytclp'Ugpuqtu



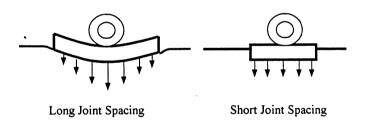
HM WTG'50V{rkecn'enko cvke"cpf"f{pco ke"tut ckp"ugpuqt"rc{qwv!qt"307"o"z'30/o"*7"\h\z'8\h\+"rcpgnt0

Bond between PCC and AC

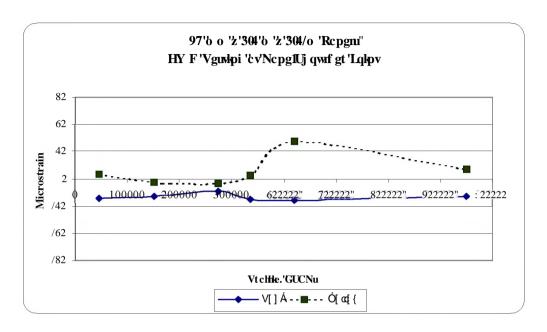


HM WTG'60' GHgev'qfl'dqpf kpi "qp"\j g"r gt hqt o cpeg"qfl\wnt c/\j kp"\y j kg\vqrrkpi u"\5+0

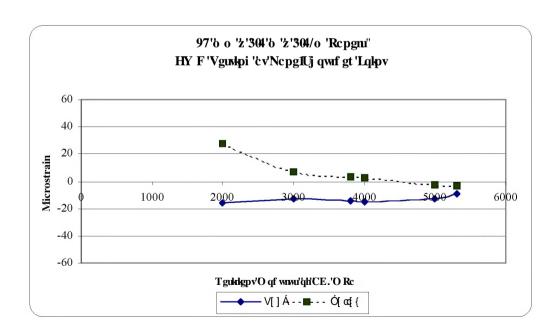
Joint Spacing



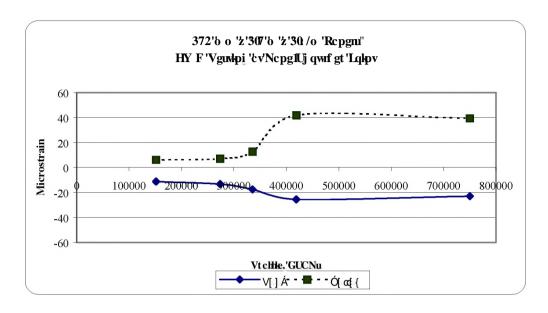
HM WTG'70' Ghgev'qlillqlpv'lurcelpi "qp"ij g"rgthqto cpeg"qlilwntc/vj lp"y j lxgvqrrlpi u"5+0



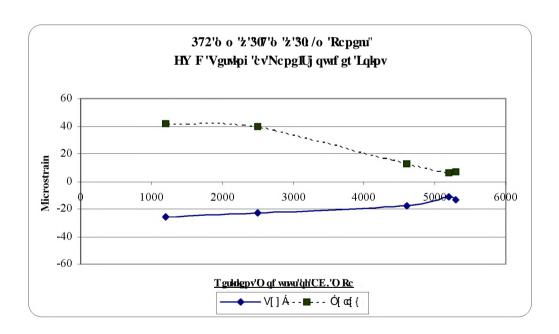
HN WTG'80' Tgrcvkqpuj kr "dgvy ggp" ut ckp" cpf "ceewo wrcvgf 'GUCNuj hqt 'Egrn'; 60



HN WTG'90T grc vkqpuj kr "dgvy ggp" ut c kp" cpf "t gukrkgpv" o qf www "qh" CE "fqt "E gm"; 60



HK WTG": OT grc kapuj kr "dgvy ggp" int ckp" cpf "ceewo wr vgf "GUCNu fat "Egri"; 80



HM WTG"; OT grc vkapuj kr "dgvy ggp" ut ckp" cpf "t gulvkgpv" o af wnwi 'qllCE 'lat 'E grd'; 80