

Jcf`YgYhU[']b'FY]b]W_YbXcfZ.; YgWX]WXhYb'YfÒZZbYb'?]bXYfkY`hYb

9f`YVYb`G]Yž'k]Y`XUg`i [YbXUa h`FY]b]W_YbXcfZ'Ua
Vi bXYgkY]hYb`Jcf`YgYhU[`Y]b`ghUf_Yg`NY]WXYb`ZØf
ZfØ_]bX`]WXY`6]`Xi b[`gYhnh"`A]hUfVY]hYbXY``YgYb`Ui g
@]YV`]b[gVØWXYfb`jcf`ibX`ZÒfXYfb`gca]h`X]Y
GdfUWXYbhk]W_`ib[`XYf`?]bXYf"`9bhXYW_Yb`G]Y`X]Y
6YXYi hib[`XYg`Jcf`YgYbg`ZØf`X]Y`Ni_ibZhgWXUbWYb`XYf
\$\D\$b[ghYb`ibX`X]Y`6Y[Y]ghYfib[ž`X]Y`Yg`]b`XYb
?]bXYfhU[YqdZY[YghY``Yb`YbhZU`hYh"



 $\label{thm:condition} $$ GYbgUh]cbY```5a ``%) "`Bcj Ya VYf`k Uf`XYf`Vi bXYgk Y]hY $$ Jcf`YgYhU[\check{z}i bX`XUg`$ [YbXUa h`FY]b]W_YbXcfZ`gYhnhY`Y]b $$ ghfU\`YbXYg`NY]WXYb`ZØf`X]Y`ZfØ_]bX`]WXY`6]`Xi b[\check{z}`XUg`g]WX $$ gY\Yb``UggYb`_Ubb``6YfY]hg`ni a `nk Y]hYb`A U``gWXbUddhY`g]WX`XUg Yb[U[]YfhY`HYUa `X]YgYf`$bgh]hi h]cb`X]Y`VYghYb`?]bXYfVØWXYf`i bX VYgi WXhY`X]Y`_`Y]bghYb`6Øf[Yf`XYg`6Yn]f_g`]b`]\fYb?]bXYfhU[YgdZY[YY]bf]WX hi b[Yb"'<]Yf`k i fXY`b]WXh'bi f$

 $\label{thm:convenience} $$ \text{ID bhY fghØhnY fb 'k UfY b'_Y]b'; Yf]b[YfYf'U'g 5 YI UbXYf'9k Yfgž'XYf'6Yn]f_gghUXhfUh'ZØf'$$ [YbX'ibX': Ua]']Y'jcb XYf'GD8 ž'ibX'7`UiX]U'GW\Øhnž'X]Y'8]fY_hcf]b'XYg'$$ [YbXUahYg"; YaY]bgUa'VYhcbhYb'g]Y.'@YgYb']gh'Y]bY'XYf'k]W\h][ghYb JcfUiggYhnib[Yb'ZØf'6]'Xib['ibX'Ni_ibZhgW\UbWYb'jcb'?]bXYfb''9g']gh'[fc>Ufh][ž'XUgg'A]hUfVY]hYbXY'Uig'ibhYfgW\]YX`]W\Yb : UW\VYfY]W\Yb'X]YgY'5_h]cb'ibhYfghØhnYb'ibX'XYb'?]bXYfb'HØfYb ni'bYiYb'KY'hYb'OZZbYb''8]YgY'$]h]Uh]jY'nY][h'; YgW\]W\hYb jYfV]bXYb'; fc>'ibX'?Y]b'''Kck ž'kUg'ZØf'Y]bY'ghUf_Y'6chgW\UZh'''$

6Y[Y]ghYfib[VY]?`Y]bibX; fc»

"8]Y'5ha cgd\ÀfY'k Uf'Y'Y_hf]g]YfYbX°8]Y'J cf'YgYf]bbYb'i bX
J cf'YgYf'\UhhYb'gcf[ZÀ'h]['Ui g[Yk À\ `hY'6ØW\Yf']a '; YdÀW_ž
XUfi bhYf' 8]Y'9i 'Y'a]h'XYf'6Yi 'Y 'i bX'a]hgUa h'XYb'5VYbhYi Yfb
Y]bYg'_`Y]bYb'6ÀfYbž'XYf'[Yk YW_h'k]fX"'8]YgY'; YgW\]W\hYb'nc[Yb
X]Y''\f b[Yb'Ni \OfYf' ']a '5`hYf'j cb'Y]b'V]g'XfY]'\\\J\fYb' ']b']\fYb
6Ubb°'A]h'A]ha UW\VØW\Yfb'k i fXY'X]Y': fYi XY'Ua '@YgYb'[`Y]W\
j YfXcddY`h'8]Y'? `Y]bYb']a]h]YfhYb'; YfÀi gW\Yž'_ca a Ybh]YfhYb
X]Y'H]YfUVYbhYi Yf'i bX'gW\]YbYb'[Uf'b]W\h'[Ybi ['j ca '@YgYb'ni
VY_ca a Yb"'\Jža Y\f'; YgW\]W\hYbž'V]hhY°''

 $\label{eq:continuous} $$ [YgYg'9] Ybh'a UWkh'_`Uf. `Jcf`YgYb']gh'Y]b'YggYbh]Y``Yf'HY]``XYf dÀXU[c[]gWXb'5fVY]h']b'XYf'?]bXYfhU[YgdZY[Y''8Ug'$[YbXUahkY]) ž'GdfUWkZÒfXYfib[']gh'X]Y'; fibXdZY]`Yf'ZØf'gdÀhYfY 6]`Xib[gYfZc`[Y''5``Y'6YhY]`][hYb'g]bX'g]Wk'Y]b]['''XUg'bÀWkghYJcf`YgYjYf[bØ[Yb'fØW_h'VYfY]hg'Ua'&%'''BcjYaVYf'bÀWkghYb $J\fYg']bg'J]g]Yf'''8]Y'JcfZfYiXY']gh'f]Yg][''''$

"9]b'_`Y]bYf'; YXUb_YbUbghc». '6]`Xi b['VY[]bbh'a]h'; YgWk]WkhYbži bX'XYf'9]bZi gg'X]YgYf'9fnÀ\`i b[Yb'_Ubb'Y]b'@YVYb'`Ub[k À\fYb"'9]bY'k i bXYfVUfY'K Y`h'j c``Yf'A Ò[`]Wk_Y]hYb'YfÒZZbYh g]Wkži bX'k]f'_ca a Yb'b]Wkh'Xfi a \Yfi a ž'Yg'ni 'ZY]Yfb'''

6Ygi WXYb G]Y i bg Ui Z a Y]b!VYf]b bYh