

5a '%%"' ≯ b]'&\$&) 'X]g_i h]YfhY'XYf'@J N!DcXWUgh'X]Y 5i gk]f_i b[Yb'XYg'<]h`Yf[fi » Yg'Ui Z'DUfhmgž'Ub[Yghc» Yb Xi fWX'XYb': U```A Y`Ub]Y'A Ø``Yf"



@Y]dn][ž8Yi hgW `UbX : 1.5a '%%" * b] *& \$\) 'ZUbX ']b 'XYf @ N!
?i ddY` XYf @ N!@j Y!DcXWUgha]h XYa 'H]hY` <]h Yf[fi » 'U`g
DUfhmgdU» 3.8 Yf: U``A Y`Ub]Y 'A Ø``Yf 'ghUhh" *a ': c_i g`XYf
8]g_i gg]cb 'ghUbXYb 'fYW hgfUX]_U`Y'; YghYb 'Ui Z'DUfhmgž
]bgVYgcbXYfY 'XYf' <]h Yf[fi » ž'bUW 'Y]bYa 'i a ghf]hhYbYb 'J cfZU``
a]h XYf 'GAb[Yf]b 'A Y`Ub]Y 'A Ø``Yfž'X]Y ']a 'GYdhYa VYf' &\$& Y]bY
YbhgdfYW YbXY'; YghY '[YnY][h'\UVYb 'gc``" 8 Yf'DcXWUgh'k i fXY']b
Ni gUa a YbUfVY]h'j cb '@Y]dn][Yf'J c`_gnY]hi b[ž'GAW g]gW Yf
NY]hi b['i bX'FYXU_h]cbgbYhnk Yf_'8 Yi hgW `UbX'fFB8Ł'dfcXi n]Yfh
i bX'V]YhYh'Y]bYb'h]YZYb'9]bV`]W_']b'X]Y'[YgY``gW UZh`]WXYb
FYU_h]cbYb'Ui Z'gc`WXY'J cfZA``Y''@J N'VYf]WX hYhž'XUgg'

8Yf'DcXWUgh'VfUW\hY'j YfgW\]YXYbY'; ÀghY'ni gUa a Ybž'X]Y']\fY

DYfgdY_h]j Yb'ni 'XYa '_cbhfcj YfgYb'H\Ya U'hY]`hYb"'l bhYf']\bYb $k Uf^GUV bY^f^* + t\tilde{z}^*X Y^1 fY^9 fZU fi b [Yb^a]h^fYW hqYl hfYa Yb$ $; YghYb^{-}a^{-}5``hU[^{-}gWX]`XYfhY^{-}ibX^{-}XUg^{-}J^{-}Yf^{-}U`hYb^{-}A^{-}b[^{-}Yf^{-}A^{-}YbgWX^{-}Yb]$ $Ui\ Z'DUfhmg'_f]h]g]YfhY"G]`_Y'f) (Ł'h\ Ya Uh]g]YfhY'X]Y'fYW\ h`]W\ Yb$?cbgYeiYbnYb'ZØf'AY`Ub]Y'AØ``Yfž'X]Y'a]h'Y]bYf'GhfUZY'jcb'%*\$ HU[YggÀhnYb'¼') \$\$'9i fc'fYW\bYb'a i gg"'@Ycb]Y'f&&Łž'Y]bY @Y\fUa hqqhi XYbh]bž'Ài »YfhY'6Yqcf[b]q'ØVYf'X]Y'ni bY\a YbXY Bcfa U`]g]Yfi b['gc`W\Yf'; YghYb'i bhYf'; [YbX`]W\Yb"'8Yf , \$! 'À\f][Y'; Øbh\Yf'\]bhYfZfU[hY'X]Y'K YfVi b['ZØf'A Ø``Yf'i bX Ài » YfhY Nk Y]ZY`Ub']\fYb'5Vg]WXhYb"5i WX'7\f]ghU'<]cV'VYf]WXhYhY jcb']\fYf'9fZU\fib['a]h'Dfcjc_Uh]cbYbž'VY]'XYbYb'XYf'<]h`Yf[fi » [YnY][hikifXY"'6YgcbXYfY'5i Za Yf_qUa _Y]h'YffY[hY'X]Y'5i ggU[Y Y]bYf'Ubcbma Yb''l b[Yb': fUi 'Ui g'8 ÒVY`bž'X]Y'| cb'Y]bYa '?]bX Ui g'Y]bYf'fYWX hgfUX]_U`Yb': Ua]`]Y'YfnÀ\`hYž'XUg'XYb'BUa Yb'5Xc`Z hfi [ži bX'X]Y'GWk |Yf][Y]hYb'VYqWk f]YVžX]Y'q]Wk'XUfUi q Yf[UVYb"

$; YgY^gWX UZh^gWX Y^FY^Y j Ubn$

8]Y'FY'Yj Ubn'X][]hU'Yf'@YVYbgk Y`hYb'i bX'X]Y'Fc``Y'gcn]U`Yf
A YX]Yb'VY]'XYf'J YfVfY]hi b['YI hfYa]gh]gW\Yf'\Rightarrow Yc`c[]Yb'g]bX
k Y]hYfY'GW\`ØggY`di b_hYž'X]Y']b'XYa '6Y]hfU['VY\UbXY`h'k YfXYb"
8]Y'\Rightarrow hYfj]Yk g'a]h'9I dYfh]bbYb'XYf'9I hfYa]ga i gdfÀj Ybh]cb
h\Ya Uh]g]YfYbž'k]Y'k]W\h]['Yg']ghž'XYa c_fUh]gW\Y'K YfhY'ni
j Yfa]hhY`b'i bX'Y]bYb'cZZYbYb'8]U`c['ni 'ZÒfXYfbž'i a 'X]Y
[YgY``gW\UZh`]W\Yb'GdU`hi b[Yb'ni 'ØVYfk]bXYb"'8]Y

<YfUi gZcfXYfi b[Yb'ZØf:: UWX_fÀZhY']b'gcn]U`Yb'9]bf]WXhi b[Yb'i bX
GWXi `Yb'g]bX'j]Y`ZÀ`h][ž'V]YhYb''YXcWX'[`Y]WXnY]h]['7\UbWYb'ZØf
[Yn]Y`hY'DfÀj Ybh]cbgUfVY]hž'i a 'X]Y'Bcfa U`]g]Yfi b[
YI hfYa]gh]gWXYf'; YghYb'ni 'j Yf\]bXYfb"'9g'V`Y]Vh'UVni k UfhYbž'cV
A Y`Ub]Y'A Ø``Yf'Ui Z'X]Y'F ØW_a Y`Xi b[Yb'Ui g'XYa 'DcXWUgh
fYU[]YfYb'k]fXž'XU'g]Y'g]WX'gY]h'XYf'J YfUbghU`hi b['b]WXh'a Y\f
[YÀi »Yfh'\Uh"</pre>

8 Yf'Dc X W Ugh']gh']b'a Y\fYfYb'HY]`Yb'j YfZØ[V Ufž'k c V Y]'X]Y'YfghYb V Y]XYb': c`[Yb'_cghYb`cg'ni '\ ÒfYb'g]b X "'8]Y'8]g_i gg]cb Yb'nY][Ybž k]Y'k]W h]['Yg']ghž'gc`W Y'H\Ya Yb']a 'ÒZZYbh`]W Yb'8]g_i fg Ubni gdfYW Ybž'i a 'Y]b'6Yk i gghgY]b'ni 'gW UZZYb'i b X J YfÀb XYfi b[Yb'Ubni ghc » Yb"

8 YhU]`g	
J cfZU``	F Ugg]ga i g
Cfh	@Y]dn][ž'8YihgWX`UbX
EiY``Yb	• k k k "`j n"XY
	• nYdfU! ^ci fbU`"XY

6Ygi WXYb G]Y i bg Ui Z b!U["bYh