

8]Y'l G5']a ': c_i g.'5FH9'VY`Yi WXhYh'K U\` i bX'?i `hi f'UV'%) "'C_hcVYf

9f`YVYb`G]Y`gdUbbYbXY`8c_i!<][\`][\hg`ibX`GYf]Yb`UiZ
5FH9`UV`C_hcVYf`&\$&(``Jcb`XYf`IG!KU\``ØVYf`X]Y
\]ghcf]gWXY`8c_i / eich/8]Y`GdU`hib[`XYf`KY`h/eich/'V]g
nif`ZYggY`bXYb`?f]a]fY]\Y/eich/JYfXUW\h#AcfX/eich/'
YbhXYW_Yb`G]Y`UiZfY[YbXY`H\YaYbUVYbXY`ibX`VYkY[YbXY
; YgWX]W\hYb"`GY\Yb`G]Y`X]Y`bYiYghYb`]bgd]f]YfYbXYb
Dfc[fUaaY`]a`NY]WXYb`jcb`?ibghibX`?i`hif"



Gd]hnYbjYfUbghU`hib[Yb'UiZ'UfhY"hj']a 'C_hcVYf''9]b <][\`][\h'bUWX'XYa 'UbXYfYb''

8]Y'K Y`h'gW\Ui h'[YVUbbh'Ui Z'X]Y'I G5' 'i bX'Ui W\'UfhY'gYhnh'Y]b NY]W\Yb''Jca''%) "'C_hcVYf'Ub'[]Vh'Yg'Y]bY'dUW_YbXY'FY]\Yž'X]Y X]Y'8fY]ZU'h][_Y]h'Ui g'Dc`]h]_ž'9a ch]cbYb'i bX'8fUa Uh]_'j YfY]bh' 8]Y'a]h'GdUbbi b['Yfk UfhYhY'I G!DfÀg]XYbhgW\UZhgk U\`'Ua') "Bcj Ya VYf'k]fZh']\fY'GW\UhhYb'j cfUi g"'\dangle 'X]YgYa UhYa VYfUi VYbXYb'Dfc[fUa a'[Y\h'Yg'b]W\h'bi f'i a'X]Y': fU[Ybž X]Y'X]Y'5a Yf]_UbYf'VYk Y[Yb.'K Yf'k]fX'Yg'f]W\hYb3'?Ua U`U'<Uff]g cXYf'8cbU`X'Hfi a d3'5fhY'VY`Yi W\hYh'X]Y'[YgY``gW\UZh`]W\Yb'?Àa dZY'i bX'dc`]h]gW\Yb'Ghc`dYfghY]bY'XYf'nYf]ggYbYb'BUh]cb"

9]b'k Y]hYfYg'<][\`][\hž'XUg'ZØf'; ÀbgY\Ui h'gcf[hž']gh'X]Y
8c_i a YbhUh]cb' 5a Yf]_U'&\$&(''8]Y'I bj YfgÒ\b`]W\Yb ž'X]Y
VYfY]hg'Y]bYb'J cf[YgW\a UW_'Ui Z'X]Y'XfØW_YbXYb'H\Ya Yb'[]Vh''
8cW\'XUg']gh'Yfgh'XYf'5bZUb[*'8Yb'Ni gW\Ui Yfb'k]fX'X]Y'8c_i
5a Yf]_U'\Uh'X]Y'K U\`.'Hfi a d'[Y[Yb'<Uff]g 'Ubg'<Yfn'[Y'Y[hž
i a 'Y]bYb'h]YZYb'9]bV`]W_']b'X]Y'\]hn][Yb'K U\`Yb'ni 'VY_ca a Yb''
I bX'U`g'cV'XUg'b]W\h'[Ybi ['kÀfYž'[]Vh'Yg'bcW\' 8Yf'HUm`cf!Gk]Zh!
9ZY_h' 'Dcd!=_cbY'i bX'dc`]h]gW\Y'<cZZbi b[ghfÀ[Yf]b "'@UggYb'G]Y
g]W\'a]hfY]»Yb'

; YgWX]WX hY Yf`YVYb Xi fWX 8c_i a YbhUh]cbYb°

6YfY]hg'UV'XYa '' %"'C_hcVYf'_ObbYb'; YgWk]Wkhg]bhYfYgg]YfhY'VY]
UfhY']b'X]Y'Xi b_`Yb'?Ud]hY`'XYf'J Yf[Ub[Yb\Y]h'Y]bhUi WkYb'' 8]Y
GdU`hi b['XYf'K Y`h'f%-'-!%-*&Ł'b]a a h'G]Y'a]h'Ui Z'Y]bY
Ya ch]cbU`Y'FY]gY'Xi fWk'X]Y'@YVYbgk Y[Y'\YfUi gfU[YbXYf\]ghcf]gWkYf':][i fYb'k]Y'K Yfb\Yf'j cb'6fUi bž'; c`XU'A Y]f'i bX
B]_]hU'7\fi gWkhgWkck "'A]h\]`ZY'j cb'XfUa Uh]gWkYb'Gd]Y`gnYbYb
i bX'bYi '_c`cf]YfhYb'5fWk]j Yb'k]fX'X]Y'NY]h'nk]gWkYb'XYb'?f]Y[Yb

: Øf'X]Y'?f]a]ZUbg'[]Vh'Yg'h\fcbh'X]Y'dUW_YbXY'K YV!Cb`m!GYf]Y

J YfXUW\h#A cfX °'5V'XYa '%, "'C_hcVYf'k]fX'9fa]hh`Yf'6 Ôfb

F Uga i ggYb' i bX'gY]bY'Xi b_`Y'9bhXYW_i b[' 'G]Y'Ub'XYb

6]`XgW\]fa 'ZYggY`b.'8 Ug'CdZYf'k Uf'gY]bY'Y][YbY'HcW\hYf'8]Y

Gi W\Y'bUW\'XYf'K U\f\Y]h'n]Y\h']\b']b'Y]b'ZYggY`bXYg'BYhn'Ui g
?cffi dh]cb'i bX'J YfVfYW\Yb"'5i Z'YXYf'9d]gcXY'k UfhYh'Y]b'bYi Ygž
gW\cW_]YfYbXYg'♣hYfj]Yk"

< YfnYfk Afa YbXY; YgWX]WX hYb i bX gdUbbYbXY 8c_i a YbhUh]cbYb°</pre>

5a %) "'C_hcVYf'[Y\h'Yg'XUbb'k Y]hYf'a]h' 9]bZUWX @]YVY žY]bYf\YfnYfk Àfa YbXYb'; YgWX]WXhYžX]Y 'HfUi Yf'i bX'@]YVY']b'Y]b 7ca YXml8fUa U'j Yfk UbXY`h'''K]f'Yf`YVYb'X]Y'Ya ch]cbU`Y 5WXhYfVU\bZU\fh'j cb'XfY]'; YbYfUh]cbYb']b'GhcW_\c`a ž'X]Y'i a XYb'J Yf`i gh']\fYf'A i hhYf'_Àa dZYb''' &gYd\]bY'6cfbYVi gWX'Vf]b[h 6Yk Y[i b[']b'X]Y'<YfnYb°

: \emptyset f`X]Y`: Ubgʻj cbʻHfi Yʻ7f]a Yʻ[]VhgʻX]Yʻ?f]a]!GYf]Y` \pm 0 [cʻH\]Y`` Mj cbbYʻi bXʻXYfʻHcX žʻX]YʻUa ''%"'C_hcVYfʻghUfhYh'''<]Yfʻk]fXʻb]W\h bi fʻY]bʻJ Yfa]gghYbZU```Ui Z[Y_`ÀfhžʻgcbXYfbʻ \pm 0 [cʻH\]Y``gY`Vghʻ[Y\h Ui ZʻY]bYʻgdUbbYbXYʻFY]gYʻUbgʻA]hhY`a YYf°

K Yf'XUbb'bcW\'b]W\h'[Ybi ['\Uhž'gc``hY'g]W\'X]Y'8c_i a YbhUh]cb 7\Uf_]k'''< Y]a Uh'XYf': chcfYVY``Yb 'b]W\h'Ybh[Y\Yb'`UggYbž'X]YbYVYb'?fYUh]cb'Ui W\'X]Y'5i gk]f_i b[Yb'XYg'?f]Y[Yg'VY`Yi W\hYh''9]b'ZUgn]b]YfYbXYg'DcfhfU]h'Y]bYf'?Øbgh`YfZUa]`]Yž'X]Y'ØVYf'XfY]; YbYfUh]cbYb'\]bk Y['_Àa dZh'

6U`X`ghY\h`Ui W\`X]Y`Ui ZgY\YbYffY[YbXY`?cbnYfhØVYfhfU[ib[jcb8]Y`6UbX`6Y]fih` @j Y`]b`6Yf`]b`&\$&(`Ubž`X]Y`UV`XYa `%, "C_hcVYf`XifW\`XYb`?`Ub[jc``Yf`9ach]cbYb`Uig:c`_`ibXg`Uk]gW\Yb`AY`cX]Yb`VY[Y]ghYfh"`9f`YVYb`G]Yž`k]Y`6Y]fih`]aHYadcXfca `X]Y`6Ø\bY`nia `6YVYb`Vf]b[h°

•

8 Y hU1`a

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