

$6 cw_W U b A b Y f < = 19 Y f A h A Ub [Y gWX fY] V Y b j c b B UgX Ue$

- 8Yf'6`cW_W\U]b!A]bYf'< = J9'\Uh'*\$'?U`YbXYfhU[Y'NY]hž'i a
 BUgXUe'Y]bYb'D`Ub'j cfni `Y[Ybž'k]Y'Yf'gY]bY''À\f`]W\Yb
 9]bfY]W\i b[gUbZcfXYfi b[Yb'bYi 'Ui gf]W\hYb'k]``
- 8 Yf'A]bYf'\Uh'gY]bY': f]gh']a '`YhnhYb'A cbUh'j YfdUgghž'k Y]`
 Yf'GWk]Yf][_Y]hYb']a 'Ni gUa a Yb\Ub['a]h'Y]bYf
 _ØfnYfYb'9]bfY]Wki b[gZf]gh'ZØf'B]Wkh!JYbhi fY!9a]hhYbhYb
 UbZØ\fhY

 $8 \ Yf' V O f g Y b b c h] Y f h Y'? f m d h c ! A] b Y f' < \\ = 9 \ '6 \ 'c W_W U] b' H Y W b c `c [] Y g [U V' U a 'A c b h U ['V Y_U b b h z' X U g g' Y f' Y] b Y b' 6 f] Y Z' j c b' B U g X U e Y f \ U `h Y b' \ U h z'] b' X Y a 'Y f' X U g' I b h Y f b Y \ a Y b' U i \ ZZ c f X Y f h z' Y] b Y b' D` U b n i f' K] Y X Y f Y f` U b [i b ['X Y f' 9] b \ U `h i b ['X Y f' ? c h] Y f i b [g f Y [Y `b' X Y f 6 O f g Y' j c f n i `Y [Y b''] b' Y b' Y b'' A y b' U i z Z c f X Y f h z' Y f b'' Y b'' X Y f'' e h] Y f i b [g f Y [Y `b' X Y f b'' Y b''' Y b'' Y b''$

 $< \exists 9 \text{ "gU[hYž'Yg'\UVY'Y]bY'6YbUW\f]W\h][ib['\ØVYf'X]Y'A \hat{Ab[Y``]ghYYf\U`hYbž'X]Y'jcb'XYf'EiU`]Z]n]Yfib[gUVhY]`ib['XYf'6\hat{O}fgYUig[YghY``h'kifXYž'bUW\XYa'XYf'A]bYf'9bXY'`YhnhYb'AcbUhg'X]Y:f]gh'Z\Øf'X]Y'^\hat{A}\f`]W\Y'9]bfY]W\ib['jYfdUggh'\UhhY''$

< ■ 9 \ Uh'* \$ '? U`YbXYfhU[Y`NY]hži a 'gY]bYb 'D`Ub'j cfni `Y[Ybž']b XYa 'XYhU]``]Yfh'VYgWXf]YVYb'k]fXž'k]Y'Yg'VYUVg]WXh][hž'FY[Y`) &) \$fWŁf%Ł'Y]bni \U`hYb"'GcVU`X'XYf'D`Ub'j c``ghÀbX]['U_nYdh]Yfh kifXYž'\Uh'XYf'A]bYf'V]g'ni'%, \$ '? U`YbXYfhU[Y'UV'XYa

: À``][_Y]hgXUhi a 'gY]bYf''À\f`]W\Yb': cfa i `Uf!(\$: !9]bfY]W\i b[NY]hž'i a 'X]Y'?cbZcfa]h\h'k]YXYfni Yf`Ub[Ybž'gU[hY'< \Rightarrow 9']b'Y]bYf 9f_`\h'f b["

; Ya À» `XYf`FY[Y``a i gg` Y]b`I bhYfbY\a Yb`U``Y`YfZcfXYf`]WXYb fY[Y`a À»][Yb':]bUbnVYf]WXhY`fYWXhnY]h]['VY]'XYf'?ca a]gg]cb ØVYf`XUg`98; 5F!GmghYa 'cXYf`VY]'XYf`UbXYfYb FY[i`]Yfi b[gVY\ÒfXY`Y]bfY]WXYb ž'gc`X]Y`K YVg]hY`XYf`6ÒfgY"

@YhnhYb'AcbUh'[UV'<=J9'VY_Ubbhž'XUgg'Yg'gY]bY': f]gh'Ua'&-"' \downarrow b] ZØf'XUg'Ua''%"'AÀfn'YbXYbXY'; YgW\ÀZhg'U\f'ia'aY\f'U`g'nkY] KcW\Yb'jYfZY\`Yb'ibX'jcfUigg]W\h`]W\'Ua'%)"' \downarrow \`]'Y]bfY]W\Yb k]fX"'8]Y'9]bfY]W\ib['ia ZUggh'[YdfØZhY' \downarrow U\fYgUVgW\`ØggYž NYfh]Z]n]Yfib[Yb'XYg'7\]YZ'9|YW'h]jY'ibX'XYg'7\]YZ':]bUbW]U`CZZ]WYf'gck]Y'AUbU[YaYbhX]g_igg]cbYb'ž'gck]Y'5bU`mgY"

< = 9 'Yfn]Y`hY']a 'Xf]hhYb'Ei UfhU``XYg'j Yf[Ub[YbYb'***\\fYg'Y]bYb
I a gUhn'j cb'a Y\f'U`g'*, 'A]``]cbYb'I G!8c``Uf'a]h'Y]bYa
BYhhc[Yk]bb'j cb'ØVYf'* ('A]``]cbYb'I G!8c``Ufž'gc'X]Y''Øb[ghYb
I bhYfbY\a YbqUb[UVYb'**\\ fYgUVqW\``ØqqY"</pre>

8 Ua U`gʻa UW\hYʻXUgʻI bhYfbY\a YbʻY]bYʻ?ca V]bUh]cbʻj cb: U_hcfYbʻj YfUbhk cfh`]W\ž'XUfi bhYfʻY]bYʻ_ØfnYfY
9]bfY]W\i b[gZf]ghʻZØfʻB]W\h!JYbhi fY!9a]hhYbhYbžʻY]bʻfUgW\Yg
K UW\ghi a `XYgʻI bhYfbY\a Ybgʻi bXʻY]bYʻNi bU\a YʻXYfʻ5bnU\`
j cbʻHfUbgU_h]cbYbž'X]YʻUi qʻX]YgYa `K UW\qhi a `fYqi `h]YfYb"

 $\label{eq:c.yb} $$ < c.Yb.G]Y.g]WX.^YXYb.5VYbX.X]Y.VYghYb.? fmd.hc! $$ BYi][_Y]hYb.i bX.9f_Ybb.hb]ggY.XYg.HU[Yg.]b.=& fYb. $$ Dc.ghY]b[Ub["." $$$

 $8 \ Yf'6Y] hfU[\ '6`c \ W\ U]b'A]bYf'< \ \exists \ 9`Yf\ A`h'A \ Ub[\ Y`gW\ fY]VYb'j \ cb$ $B \ UgXUe']gh'_Y]bY'Z]bUbn]Y``Y'6YfUhib[\ "$

8 YhU]`q

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. '_fmd hc!b Yk g"Uh