

K Y`h_i `hi fYb`\Ui hbU\.'%) " : c`_`cfYZYgh]j U`']b`XYf`@Ui g]hn`Yfk UfhYh X]WX°

9f`YVYb`G]Y`XUgʻ≢bhYfbUh]cbU`Y`: c`_`cfYZYgh]j U``&\$&) `]b 6Ui hnYb`j ca `&*"'V]g`&-"'≯b]`a]h'?i `hi f[fi ddYb`Ui g`U``Yf K Y`h"



7fcghk]hnž'8Yi hgW `UbX'! *\D'XYf'@Ui g]hn'[Y\h'X]Y'Dcgh'UV''Jca&*"'V]g'&-"'\D' b]'k]fX'XUg'%) "'\D' hYfbUh]cbU`Y': c`_`cfYZYgh]j U`

I =75'' I M75'' @5I G\D' X]Y'FY[]cb']b'Y]bY'Vi bhY'?i`]ggY'Ui g
HUbnž'A i g]_'i bX'_i`]bUf]gWXYb'; YbØggYb'j Yfk UbXY`b"

Cf[Ub]g]Yfh'j ca '8 ca ck]bU'' 6i bX'@Ui g]hnYf'GcfVYb'i bX
nU\`fY]WXYb'DUfhbYfbž'Yfk UfhYh'X]Y'6Ygi WXYf'Y]b'XfY]hA[][Yg': Ygh XYf'?i`hi fYb"

8]Y '9fÒZZbi b['XYg': YghYg'Z]bXYh'Ua '&*"'¾ b]'i a '%, 'I \f'a]h Y]bYa 'ZY]Yf`]WXYb'I a ni ['Xi fWX '6Ui hnYb'ghUhhž'[YZc`[h'j cb'Y]bYf ; U`U']a '8Yi hgWX!GcfV]gWXYb'Jc`_gh\YUhYf"': Ugh'nk Ubn][9bgYa V`Yg`Ui g`9i fcdUž`5Zf]_U`i bX`GØXUa Yf]_U`g]bX`Ua `GhUfh" I bhYf`]\bYb`XUg`GU`m'J Y`]b[UfU`6U``Yh`Ui g`GYbY[U`ž`XUg`a]h hfUX]h]cbY``Yb`k YghUZf]_Ub]gW\Yb`HÀbnYb`i bX`A i g]_`ZØf`Y]bYb YW\hYb`<]b[i W_Yf`gcf[Yb`k]fX"

?i `hi fY``Y J]Y`ZU`h'i bX \ UbXk Yf_`]W\Y HfUX]h]cbYb

5i Z'XYa 'Dfc[fUa a 'ghY\Yb'b]W\h'bi f'hÀbnYf]gW\Y'8 UfV]Yhi b[Ybž gcbXYfb'Ui W\'Y]b'A Uf_h'hfUX]h]cbY``Yf'; Yk Yf_Yž'k c'fY[]cbU`Y < UbXk Yf_g_i bgh'dfÀgYbh]Yfh'k]fX"'8 Ug': Ygh]j U``]gh'A]h[`]YX'j cb $7 \in :: f$ ž'k Ug'VYXYi hYhž'XUgg'U``Y'Dfc[fUa a Y'_i `hi fY`` Ui h\Ybh]gW\'g]bX'i bX'\c\Yb'cf[Ub]gUhcf]gW\Yb'GhUbXUfXg [Yb \emptyset [Yb"

 $5a : fY]hU[\check{z}'XYb'\&+"' \not\Rightarrow b]\check{z}'X\varnothing fZYb'g]WX'X]Y'; \grave{A}ghY'Ui Z'Y]bYb'5VYbX \\ a]h']bhYfbUh]cbU'Yf': c`_`cfY']b'8fUWX\Ui gYb'ZfYi Yb\check{z}'Yf[\grave{A}bnh Xi fWX'fY[]cbU'Y'_i `]bUf]gWXY'GdYn]U`]h\grave{A}hYb"'5a 'GUa ghU['k]fX \\ 7fcghk]hn'ni f': Ygha Y]`Y' 'X]Y' < \grave{O}ZY'XYf'; Ya Y]bXY'V]YhYb \\ 9]bV`]W_Y']b'X]Y'gcfV]gWXY'i bX'fY[]cbU'Y'? <math>\varnothing$ WXYž'k \grave{A} YbX]bhYfbUh]cbU'Y'; fi ddYb'UV'%* I\f'Z\Øf'I bhYf\U`hi b['gcf[Yb"

9]b:YghZØfU``YG]bbY

9]b'<][\`][\hk]fX:XYf?i`hi fZcfi a 'Ua '&, "'\$ b]'gY]bž'XYf'i a '%\$
I\f']b'6Ui hnYb'VY[]bbh"'<]Yf'k]fX']bhYbg]j 'ØVYf'XUg'`YVYbX][Y?i`hi fYfVYž'Y]bYg'XYf'H\Ya Yb'XYf'I B9G7Cž'X]g_i h]Yfhž'k Y`WXYg
a ØbX`]WXY'HfUX]h]cbYbž'XUfghY``YbXY'? ØbghY'i bX'gcn]U`Y'F]hi U`Y
i a ZUggh"'K]Y'k]WXh]['X]Y'6Yk U\fi b['X]YgYg'9fVYg']ghž
j YfXYi h`]WXh'X]Y'I B9G7C'gY`Vgh'a]h']\fYa ', VYfY]b_ca a Yb'j cb
&\$\$' ž'XYa 'a]hh`Yfk Y]`Y'%+, 'JYfhfU[gghUUhYb'Ub[Y\ÒfYb"

8 Yf "YhnhY : YghhU['Ua '&- "' * b] 'ghUfhY h'a]h'Y]bYa 'a Y\fgdfUW\][Yb; chhYgX]Ybghi bX'Y]bYa '[fc > Yb : Yghi a ni ["'8 Ug':]bU`Y "Àggh b]W\h``Ub[Y'Ui Z'g]W\k UfhYb 'i a '%* 'I\frk]fX'Ui Z'XYf < Ui dhVØ\bY'XYg': Ygh]j U`g'XUg'[fc > Y':]bU`Y'[YZY]Yfh"'8 Ua]h'XUg [YgUa hY'K cW\YbYbXY'b]W\hg']a 'K Y['ghY\hž'k]fX'Y]b'6i g!G\i hh`Y!

9]b j]Y ZÀ h][Yg Dfc[fUa a

<]YfY]bY', VYfg]W\h'XYf'k]W\h][ghYb'Dfc[fUa a dib_hY.</pre>

- 8cbbYfghU[ž'&*"'>i b]. '9fÒZZbi b['i bX': Yghi a ni [
- : $fY]hU[\check{z}^*\&+"^*\dot{s}b]$. '9ghfUXY']bhYfbUh]cbU`Yf': c`_`cfY']b 8 fUW \ Ui gYb
- GUa ghU[ž'&, "'>i b]. 'Aig]_ž'; YgUb['ibX'HUbn']b 7fcghk]hn
- GcbbhU[ž'&-"'xib]. 'A Y\fgdfUWX][Yf'; chhYgX]Ybgh'ibX : YghZ|bU`Y

 $8]Y `9]b hf]hhgd fY]gY `g]b X `ZUa]`]Y b ZfY i b X`]WX `[YghU`hYh `8]Y `; U`U _cghYh`&$ `9i fc ž`HU[Yg_UfhYb `ZØf`7fcghk]hn``]Y[Yb`VY]'' &`9i fcfYfa Å»][h`&$ `9i fcŁz`i b X`XYf`GcbbhU[gY]bhf]hh`VYhfÅ[h`%&`9i fcfYfa Å»][h`, `9i fcŁ''?]b XYf`V]g`%) `$\J\fY`\UVYb`ZfY]Yb`9]bhf]hh°$

6Ygi WXYb'G]Y'X]Y'K YVgY]hY'XYg': Ygh]j U`g'ZØf'k Y]hYfY

DZcfa Uh]cbYb'ni 'XYb'hY]`bY\a YbXYb'; fi ddYb'i bX'XYa
j c``ghÀbX][Yb'Dfc[fUa a "'@UggYb'G]Y'g]WX'X]YgYg'_i `hi ffY]WXY

9f`YVb]g']b'XYf'@Ui g]hn'b]WXh'Ybh[Y\Yb'

8 YhU]`g	
Cfh	7fcghk]hnž8YihgWX`UbX
EiY``Yb	 k k k "gUYWX g]gWX Y"XY k k k "a]bXYf\Y]hYbgY_fYhUf]Uh"X Y k k k "_a _"cf[

6 Ygi W Yb 'G]Y 'i bg 'Ui Z 'b!U["bYh