

9ld`cg]cb`]b`A Ya a]b[Yb.'9]b`K i bXYf c\bY`k Y]hYfY`J Yf`YhnhY

D'A Ya a]b[Yb'_Ua 'Yg'Ua '&*"'→' `]'ni 'Y]bYf'j Yf\YYfYbXYb

9I d`cg]cb"'9]b'→ [YbX`]WXYf'ghUfVž'; `ØW_']a 'I b[`ØW_

j Yf\]bXYfhY'k Y]hYfY'J Yf`YhnhY"

9]b'GW\cW_'ZØf'A Ya a]b[Yb.'9]b'`Ui hYf'?bU``i bX'Y]bY'Yl d`cg]j Y G]hi Uh]cb'\UVYb'Ua': fY]hU[UVYbXž'XYa'&*"' \Rightarrow ']ž'X]Y'6Yk c\bYf XYf'GhUXh']b'5`Ufa VYfY]hgW\UZh'j YfgYhnh''8]Y'9l d`cg]cb'YfY][bYhY g]W\']a 'C ghYb'XYf'GhUXh'i bX'ZØ\fhY'ni 'Y]bYa 'a Ugg]j Yb'9]bgUhn XYf'FYhhi b[g_fÀZhY'''Hfchn'XYg'XfUa Uh]gW\Yb'JcfZU``g'[UV'Yg YfghUi b`]W\Yfk Y]gY'bi f'Y]b'HcXYgcdZYfž'k À\fYbX'X]Y'a UhYf]Y``Y NYfghÒfi b['k Y]hfY]W\YbX'i bX'U`Ufa]YfYbX']gh''

K Ug [YgW U\]b A Ya a]b[Yb3

8]Y'9Id`cg]cb`nc['Y]bY'gWkkUfnY'FUiWkgÀi`Y']b'XYb'<]a a Y``ibX``ÒghY'Y]bYb'gcZcfh][Yb'5`Ufa 'Uig"'nU\`fY]Wk'Y]b[YgYhnhYBchfiZbiaaYfb']bZcfa]YfhYb'ØVYf'XYb'JcfZU``žibX']bbYf\U`VkYb][Yf'A]bihYb'kUfYb':YiYfkY\fž'FYhhib[gX]YbghY'ibX'Dc`]nY]jcf'Cfh"'5iWk'XYf'?UhUghfcd\YbgWkihn'kifXY'U`Ufa]YfhžibX'XUg?`]b]_ia'AYaa]b[Yb'ghY``hY'XYb'?UhUghfcd\YbU`Ufa'ZYgh"

8]Y XfUa Uh]gW Yb 5i gk]f_i b[Yb

8]Y '9I d`cg]cb 'ZØ\fhY 'ni 'YI hfYa Yf'NYfghÒfi b[.'9]b 'FY]\YbYW_\Ui g k i fXY 'hchU` 'XYa c`]Yfh'i bX 'Ui W\ 'Y]b 'B UW\VUf\Ui g 'k i fXY 'ghUf_ VYgW\ÀX][h" 'HfØa a YfhY]`Y 'Zc[Yb 'VYY]bXfi W_YbXY '%) \$ 'A YhYf k Y]h" '6YgcbXYfg 'hfU[]gW\ ']gh'XYf'J Yf`i gh'Y]bYg '%+! 'À\f][Yb \(\frac{1}{2}\) bXYb 'K i fXYž'k À\fYbX g]W\ 'Y]b 'UbXYfYf'J Yfa]gghYf'gW\ bY`` 'U`g'k c\`Ui Z'a Y`XYhY"'9]bY

Gcf[Yia X]Y5bkc\bYf

8]Y '5bk c\bYfž'X]Y 'Ub'X]YgYa ': fY]hU[UVYbX']a ': fY]Yb
j Yf[bØ[hYbž'ghUbXYb'ghY``j YfhfYhYbX'ZØf'XUg'; `ØW_ž'XUgg
b]Ya UbX'Yfbgh\UZh'j Yf`Yhmh'k i fXY"'? UVVY`bXY'8 UW\n]Y[Y``i bX
UbXYfY'GW\i hhghØW_Y'\UhhYb'nk Uf'Y]bYb'[fc » Yb'F UX]i gž'Xc W\
gW\ØhnhYb'i bn\\`][Y'GW\i hnYb[Y``X]Y'A YbgW\Yb']b'XYf
I a [YVi b["'8]Y': Yi Yfk Y\f'_cbbhY'YXcW\'Y]bYb'j Yf`YhnhYb
: Yi Yfk Y\fa Ubb'j YfnY]W\bYb"

9]b 6`]W_Ui Z'X]Y : c`[Yb

Hfchn:XYg'hfU[]gWXYb'9f[YVb]ggYgž'gc``hY'XYf'JcfZU```Ui WX'U`g A U\bi b['Ub'UbXYfY'5bk c\bYf'k U\f[Ybca a Yb'k YfXYb.'J]Y`Y XYf'VYgWXÀX][hYb': U\fnYi [Y'[Y\ÒfhYb'Hci f]ghYbž'X]Y'Ua '?U`_Yf : Y`X'[YdUf_h'\UhhYbž'i a '; Y`X'Ub'DUf_[YVØ\fYb'Ua '5``[Ài 5]fdcfh'ni 'gdUfYb'''9]bY'a Yf_k ØfX][Y': cfa 'XYf'GWXUXYbZfYi XY a UWXhY'g]WX'i bhYf'XYb'5bk c\bYfb'VfY]hž'XU'g]Y'X]Y'; YZU\fYb i bUWX hgUa Yf'DUf_d`Uhnk U\``hfYZZYbX'fYZY_h]Yfh''

8]Y bàWkghY GWkf]hhY ZØf X]Y ; Ya Y]bXY

8]Y'GhUXh'ghY\h'j cf'Y]bYf'`Ub[Yb'i bX'gWk]Yf][Yb'NY]h'XYf
K]YXYf\YfghY``i b["'8]Y'GW\AXYb'g]bX'Ybcfa ž'i bX'XUi Yfh'b]Wkh
bi f'Ghi bXYbž'i a 'g]Y'ni 'ei Ubh]Z]n]YfYbž'gcbXYfb'Ui Wk'j]Y`'; YXi `X
i bX'[Ya Y]bgUa Y'5bghfYb[i b[Yb'XYf'; Ya Y]bXYž'i a 'k]YXYf
Bcfa U`]h\Ah'\Yfni ghY``Yb"

8]YgYf'JcfZU``'j YfXYi h`]W\hž'k]Y'k]W\h]['Yg']ghž'g]W\Yf\Y]hgVYki gghni 'gY]b'i bX'g]W\'dchYbn]Y``Yb'F]g]_Yb'VYki gghni 'a UW\Yb"'8]Y 9f`Y]W\hYfi b['bUW\'XYb'XcddY`hYb'Bchfi ZYb'Yf]bbYfh'i bg'XUfUbž XUg'@YVYb'b]W\h'ZØf'gY`Vghj Yfgh\hX`]W\'ni '\U`hYb"

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'b!U["XY