

? OfdYf`]WX Y 5i gY]bUbXYfgYhni b[Yb ']b HfUi bghY]b. 'Dc`]nY]'gi WX h'NYi [Yb

♣ 'HfUi bghY]b'_Ua 'Yg'Ua ': fY]hU[UVYbX'ni
5i gY]bUbXYfgYhni b[Yb'a]h'GhY]b'i bX'A YggYf"'Dc`]nY]
Yfa]hhY`hž'_Y]bY'JYf`YhnhYb'[YaY`XYh"

5a : fY]hU[UVYbX :gcf[hYb :nk Y] 'J cfZÀ``Y ']b 'XYf' ♣ bYbghUXh'j cb HfUi bghY]b 'ZØf' 5i ZgY\Ybž'cVk c\``[`ØW_`]W\Yfk Y]gY 'b]Ya UbX j Yf`Yhnh'k i fXY" '8]Y '9fY][b]ggY 'k YfZYb 'Y]b '@]W\h'Ui Z'XUg'H\Ya U XYf'; Yk U`h']b 'ÒZZYbh`]W\Yb 'F Ài a Yb 'i bX 'X]Y 'K U\fgW\Y]b`]W_Y]hž XUgg 'gc`W\Y'G]hi Uh]cbYb ']b 'XYf'Ni _i bZh'YfbYi h'Ui ZhfYhYb'_ÒbbhYb"

² ZZY b h`]WX Y ; Y k U`hUi gV f Ø WX Y]b HfUi b g h Y]b

; Y[Yb'%-"() 'I \fa Y`XYhYb'5bk c\bYf'Y]bY'GW\`À[YfY]'Ui Z'Y]bYa DUf_d`Uhn']b'XYf'7fU]`g\Y]a ghfU» Y"'6Yf]W\hYb'ni Zc`[Y'k UfYb'j]Yf DYfgcbYb'Ub'XYf'5i gY]bUbXYfgYhni b['VYhY]`][hž'k cVY]'XfY] DYfgcbYb'Ui Z'Y]bYb'Y]bn][Yb'A Ubb'Y]bgW\`i [Yb"'5`g'X]Y'Dc`]nY] Y]bhfUZž'k UfYb'X]Y'6YhY]`][hYb'YXcW\'VYfY]hg'j YfgW\k i bXYbž'k UgX]Y'JYfk U`hi b['XYf'G]W\Yf\Y]h']b'HfUi bghY]b'ZfU[`]W\'YfgW\Y]bYb `Aggh"

9]b GhY]b i b X Y]b A YggYf U`g K UZZYb

9]b'k Y]hYfYf'JcfZU```YfY][bYhY'g]W\']b'XYf'GU`]bYbghfU» Yž'k c'Y]b
&'!'À\f][Yf'A Ubb'Ui g'HfUi bghY]b'Y]bYb'GhY]b'[Y[Yb'Y]bY'<Ui ghØf
k UfZ'i bX'XUg'; `Ug'nYfghÒfhY''' = b'XYfgY`VYb'; fi ddY'k Uf'Y]b
'\$!'À\f][Yf'HfUi bghY]bYf'VYgW\i `X][h'k cfXYbž'Y]bYb'&%!'À\f][Yb
a]h'Y]bYa 'A YggYf'VYXfc\h'ni '\UVYb'''8]YgY'JcfZÀ``Y'_ObbYb'X]Y
VYgcf[b]gYffY[YbXYb'HfYbXg']a '6YfY]W\'XYf'\rightarrow [YbX[Yk U`h
j YfXYi h`]W\Ybž'X]Y'g]W\']b'j]Y`Yb'GhÀXhYb'\YfUi g[YV]`XYh'\UVYb''

$G]WXYfY]h^{-}b^{-}XYf^{-}; Ya Y]bgWX UZh$

 $8]Y `Dc`]nY] `hY] `hY `a]hž `X Ugg`hfchn` XYf `Yg_U`]YfhYb`G]hi Uh]cb \\ b]Ya UbX `j Yf`Yhnh`k i fXY" 8]Yg`k]fZh`: fU[Yb`ni `XYb \\ G]WX Yf\Y]hga U **b U\a Yb`]b` XYf`GhUXh`Ui Zi bX`j YfXYi h`]WXh`X]Y \\ B c hk YbX][_Y]h`j cb` <math>\Rightarrow$]h]Uh]j Yb`ni f`; Yk U`hdfÀj Ybh]cb`i bX`XYf \\ GWX UZZi b[`Y]bYg`g]WXYfYb`I a ZY`XYg`ZØf`U``Y`6Øf[Yf" 8]Y`b]WXh j Yf`YhnhYb`DYfgcbYb`]b`X]YgYb`J cfZÀ``Yb`_ObbhYb`YVYbgc``Y]WXh`ni CdZYfb`[Yk cfXYb`gY]bž'k Ug`X]Y`8f]b[`]WX_Y]h`Y]bYf`Yf\O\hYb K UWXgUa _Y]h`i bhYfghfY]WXh''

5i Zfi Z'ni f'A]h\]`ZY

8]Y'Dc`]nY]'gi W\h'bUW\'NYi [YbžX]Y'\DZcfa Uh]cbYb'ni 'XYb GhfY]h][_Y]hYb'\UVYb"'DYfgcbYbž'X]Y'Yhk Ug'[YgY\Yb'\UVYbž k YfXYb'[YVYhYbž'g]W\'i bhYf'XYf'HY`YZcbbi a a Yf'\\$, * \\#, +'!\\$ a]h'XYf'Dc`]nY]]bgdY_h]cb'HfUi bghY]b']b'JYfV]bXi b['ni 'gYhnYb" Gc`W\Y'; Ya Y]bgW\UZhgU_h]cbYb'g]bX'k]W\h][ž'i a 'X]Y'; YZU\fYb j cb'; Yk U`h']b'ÒZZYbh`]W\Yb'F Ài a Yb'ni 'a]b]a]YfYb'i bX'XUg 6Yk i gghgY]b']b'XYf'6Yj Ò`_Yfi b['ni 'gW\AfZYb"

· · · fy X

B 5:

8 Y hU]`g

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