

6UmYfb 'VYfY]hYh'g]W\ 'Ui Z' <]hnYk Y`Y'j cf.
6]g'ni ') ; fUX'Yfk UfhYh"

8Yf'8K 8'k Ufb'hj cf'Y]bYf'<]hnYk Y`Y'j]b'6UmYfb.
HYa dYfUhi fYb'V]g') ; fUX'Yfk UfhYh"]H]ddg'ni f
; Ygi bX\Y]hgj cfgcf[Y']b_ 'i g]j Y"

⇒ a Yf'k]YXYf'k YfXYb']b'6UmYfb'Yi hfYa Y'HYa dYfUhi fYb
[Ya YggYbž'X]Y'cZh'ni ; Ygi bX\Y]hgf]g]_Yb'ZØ\ fYb"8Yf'8Yi hgW\Y
K YhhYfX]Ybgh'f8K 8'k\Uh'Y]bY'K Ufbi b['Ui g[Y[YVYbž'X]Y
hY]k Y]gY'X]Y'6Yj Ò_ Yfi b['U'Ufa]Yfhi bX'gYbg]V']g]Yfh"
⇒ gVYgcbXYfY'X]Y'ca a YbXYb'HU[Y'j YfgdfYW\Ybž'ni gÄhn']W\Y
5i Za Yf_gUa _Y]h'Ui Z'X]Y'<]hnYVY'Ughi b['ni 'Yb_Yb"

9]bY' <]hnYk Y`Y'ZØf'6UmYfb'Yfk UfhYh

⇒ XYb'bÄW\ghYb'HU[Yb'k]fX'XUg'H\Yfa ca YhYf']b'6UmYfb'Ui Z'V]g
ni ') ; fUX'ghY][Yb"6YgcbXYfg'VYhfcZZYb'g]bX'X]Y'FY[]cbYb'i a
A ØbW\Ybž'DUggUi 'i bX'8cbUi !F]Yg"8]Y'K Ufbi b['XYg'8K 8' []h
Ua 'GcbbhU['nk]gW\Yb'%%i bX'%- 'i \f" 'Gc'W\Y'c\Yb
HYa dYfUhi fYb'YffY]W\Yb'cZh'bi f'X]Y'\Y]» YghYb'HU[Y'XYg'J\ fYg
i bX'\UVYb'XUg'DchYbn]Už'b]W\hibi f': fY]nY]hU_hj]]hÄhYb'ni
VYY]bZi ggYbž'gcbXYfb'Ui W\ [Ygi bX\Y]h']W\Y'DfcV'Ya Y'ni
j Yfi fgUW\Yb"

; Ygi bX\Y]h']W\Y'5i gk]f_ 'i b[Yb' 'i bX'bØh][Y
J c fg]W\hga U» bU\ a Yb

8Yf'8K 8'k Y]gh'XUfUi Z'\]bž'XUgg'<]hnYVY'Ughi b['ZØf'XYb
a YbgW\]W\Yb'? ØfdYf'[YZÄ\ f']W\k YfXYb'_Ubb"9g'k]fX'[YfUhbž
X]Y'X]fY_hY'GcbbYbY]bghfU\ 'i b['ni 'j Yfa Y]XYbž'fY[Y'a Ä»][
K UggYf'ni 'hf]b_Yb' 'i bX'⇒ bYb'fÄi a Y'a Ò[']W\gh'_Ø\ 'ni '\U'hYb"

⊕gVYgcbXYfY`À`hYfY`A`YbgWXYb`i`bX`DYfgcbYb`a`]h
J`cYfY`_fUb`_i`b`[`Yb`g]bX`[`Y`ZÀ`fXYhž`k`Ybb`X]Y`HYa`dYfUhi`fYb`
Yi`hfYa`ghY][`Yb`"

8`Yf`Gca`a`Yf`n]Y`h`X]Y`A`YbgWXYb`Ub`X]Y` GYYb`

8]Y`gca`a`Yf`]WXYb`HYa`dYfUhi`fYb`ZØ`fYb`XUni`ž`XUgg`j`]Y`Y`
A`YbgWXYb`Ub`X]Y`nU`fY]WXYb`GYYb`]b`6UmYfb`ghf`Òa`Yb`"8]YgY`
V]YhYb`Y]bY`k`j`_ca`a`YbY`9fZf]gWxi`b`[`Ub`Y]»Yb`HU[`Yb`i`bX`g]bX`
VYgcbXYfg`VY]:`Ua`j`]Yb`i`bX`↑`b`[`Yb`@Yi`hYb`VY`]YVh`9]b`VfY]hYg`
5i`gZi`[`gUb`[`YVchi`bX`X]Y`A`Ò[`]WXY`hž`g]WXY`ja`K`UggYf`
UVni`_Ø`Yb`ž`g]bX`5gdY`hY`ž`X]Y`X]Y`VUmYf]gWXYb`GYYb`ni`Y]bYa`
VY`]YVhYb`N]Y`a`UWXYb`ž`]bgVYgcbXYfY`k`Ybb`X]Y`HYa`dYfUhi`fYb`]b`
X]Y`<`Ø`Y`gWXY`bY`Yb`"

K`YhhYfdfc`[`bcgY`ZØf`X]Y`_ca`a`YbXYb`HU[`Y`

5a`GUa`ghU[`ž`XYb`%\$`"5i`[`i`ghž`k`]fX`VYfY]hg`a`]h`HYa`dYfUhi`fYb`
nk`]gWXYb`&`*`i`bX`" `&`;`fUX`[`YfYWXYbYh`8]Y`Dfc`[`bcgYb`XYi`hYb`
XUfUi`Z`]\bž`XUgg`Ua`GcbbhU[`]X]Y`HYa`dYfUhi`fYb`k`Y]hYf`ghY][`Yb`
k`YfXYbž`k`cVY]Y]b][`Y`F`Y`[`]cbYb`HYa`dYfUhi`fYb`V]g`ni`" `(;`fUX`
YffY]WXYb`"8`UVY]V`Y]VYb`X]Y`B`À`WXY`hY`Y`Yf`a`j`Xž`k`Ug`Y]bYb`
ghYh][`Yb`K`YWXYg`Y`nk`]gWXYb`<`]hnY`Ua`HU[`]i`bX`Yfhf`À[`]WXYb`
B`À`WXYb`Yfa`Ò[`]WXYh`"

<`]hnYk`Y`Y`U`g`[`YgY`gWXY`UZh`]WXYg`D`À`bca`Yb`

8]Y`U`_hi`Y`Y`<`]hnYk`Y`Y`]b`6UmYfb`gd]Y[`Y`h`Y]b`[`fØ»`YfYg`
[`YgY`gWXY`UZh`]WXYg`D`À`bca`Yb`k`]XYfž`XUg`g]WXY`]b`XYb`Y`hnhYb`
⋈\fYb`VYa`Yf`_VUf`[`Ya`UWXYh`U`h`9i`hfYa`Y`K`YhhYf`U[`Yb`k`YfXYb`
\`Ài`Z][`Yfž`k`Ug`X]Y`B`ch`k`YbX][`_Y]hij`cb`Df`Àj`Ybh]cbggghfUhiY`[`]Yb`i`bX`
5i`Z`_Àfi`b`[`ØVYf`;`Ygi`bX`Y]hggWXY`hn`Ub`k`Ufa`Yb`HU[`Yb`
j`YfXYi`h`]WXYh`8`Ug`6Yk`i`gghgY]b`ZØf`gc`WXY`K`YhhYfd`\`À`bca`YbY`i`bX`
XYfYb`F`]g]_Yb`]gh`]b`XYf`6Yj`Ò`_Yfi`b`[`[`Ygh]Y[`Ybž`k`Ug`g]WXY`Ui`WXY`]b`
XYf`5bnU`X`Yf`⊕`Zcfa`Uh]cbg`_Ua`dU[`bYb`XYg`8`K`8`b]YXYfgWXY`À[`h`"

8]Y`_ca a YbXYb`HU[Y`]b`6UmYfb`j YfgdfYWX Yb`U`gc
`cWXgca a Yf`]WX Yg`K YhhYfz`XUg`gck c`\``: fY]nY]hj Yf[bØ[Yb`U`g
Ui WX`[Ygi bX`Y]h`]WX Y`F]g]_Yb`a`]h`g]WX`Vf]b[h`9]b
j YfUbhk cfhi b[gj c``Yf`l a [Ub[`a`]h`XYf`<]hnY`k`]fX`Ya dZc`\`Ybž`i a
X]Y`\Y]» Yb`HU[Y`i bVYgWX UXYh`ni`ØVYfghY`Yb`"

8YhU]`g

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