

: fY]VUX '7cVi f['V`Y]Vh'[YgWX`cggYb. GWXk]a a Yf!HU`YbhY'_Àa dZYb'i a A YXU]``Yb°

: fY]VUX '7cVi f[']b 'A ØbghYf'V`Y]Vh'Ua '&, "'i bX'&- "'≯b] k Y[Yb 'XYf'BcfXk YghZÀ`]gWXYb '@Ub[VU\ba Y]ghYfgWXUZhYb [YgWX`cggYb"



A ØbghYfž'8 Yi hgWX`Ub X`!'5a '_ca a Yb XYb'K cWXYbYb XY'V`Y]Vh XUg': fY]VUX'7cVi f[']b'A ØbghYf'X]WXh''5a 'GUa ghU[ž'XYa '&, "'\$b]ž' i b X'GcbbhU[ž'XYa '&- "'\$b]ž'Z]b XYb'X]Y'B cfXk YghZÀ`]gWXYb @Ub[VU\ba Y]ghYfgWXUZhYb']a 'GWXk]a a Yb'ghUhhž'i b X'a Y\f'U`g &(\$\$'Gdcfh`Yf]bbYb'i b X'Gdcfh`Yf'Ui g'[Ubn'8 Yi hgWX`Ub X'\UVYb g]WX'Ub[Ya Y`XYh''8]YgYg'; fc» YfY][b]gž'cf[Ub]g]Yfh'j cb'XYf GhUfh[Ya Y]bgWXUZh'GWXk]a a Yb'A ØbghYf'Y"J "ž'j Yfgdf]WXh gdUbbYbXY'K Yhh_Àa dZY'i b X'Y]b'j c``Yg'<Ui g"

 $5VYf'_Y]bY'Gcf[Y\check{z}'gWk]a \ a \ VY[Y]ghYfhY': Ua]`]Yb'a \ \emptyset ggYb'b]WkhUi Z'6UXYhU[Y'j Yfn]WkhYb''8]Y': fY]VAXYf'GhUdY`g_chhYb''i bX$

<]`hfi d`\UVYb`Ub`VY]XYb`HU[Yb`fY[i`Àf`[YÒZZbYh`ibX`V]YhYb`Y]bY
hc``Y`5`hYfbUh]j Y`ZØf`U``Yž`X]Y`g]W\`Ub`XUg`_Ø\`Y`BUgg`k U[Yb
a ÒW\hYb"`8Ug`: fY]VUX`GhUdY`g_chhYb``ÒZZbYh`gY]bY`HcfY`j cb`-`V]g
&\$`I\fž`k À\fYbX`XUg`: fY]VUX`<]`hfi d`j cb`%\$`V]g`&\$`I\f
VYfY]hghY\h"</pre>

: fY]VUX!5b[YVchY'ZØfg'K cWXYbYbXY

8 Ug': fY]VUX'GhUdY`g_chhYb'di b_hYh'a]h'gY]bYf
: Ua]`]YbZfYi bX`]WX_Y]h'i bX']gh'[i h'ØVYf'X]Y'K c`VYW_Yf'GhfU» Y
YffY]WXVUf"'9]b'?]cg_'a]h'`YW_YfYb'GbUW_g'k]Y'A]b]d]nnU'i bX
Dca a Yg'gcf[h'ZØf'XUg'`Y]V`]WXY'K c\`ž'i bX'XYf'Gd]Y`d`Uhn'gck]Y
X]Y'6Ug_YhVU``!'i bX'J c``YmVU``ZY`XYf'g]bX'[UfUbh]Yfh'Y]b'<]h'VY]
XYb'_Y]bYb'; ÀghYb"

8 Ug : fY]V UX '7 c Vi f[']a '8 Y hU]`

8 Ug: fY]VUX:7cVi f[']gh'a]h', *"++*; ÀghYb'gY]h'GU]gcbVY[]bb'Ua %"'A U]'XUg'a Y]ghVYgi W\hY: fY]VUX'A ØbghYfg"'8]Y'nYbhfU`Y'@U[Y i bX'X]Y'[UfUbh]YfhY'K UggYfhYa dYfUhi f'j cb'a]bXYghYbg'&'; fUX Xi fW\Y]bY'Gc`UfUb`U[Y'i bX'Y]bYb': Yfbk Àfa YUbgW\`i gg'a UW\Yb Yg'VYgcbXYfg'UhhfU_h]j "'Fi bX'i a 'XUg'GdcfhVUX'a]h'gY]bYa) \$!A YhYf!GW\k]a a YfVYW_Yb'i bX'Y]bYa 'Gdfi b[VYW_Yb'ZØf'X]Y A i h][Yb'[]Vh'Yg'gUi VYfY'I a _`Y]XYb'i bX'Y]bY'a cXYfbY I `hfUZ]`hfUh]cbž'X]Y'ZØf'Ui g[YnY]W\bYhY'K UggYfei U`]h\h'gcf[h"'5i W\XUg'VY`]YVhY': `i h`]W\hgW\k]a a Yb'ni a 'GU]gcbUVgW\`i gg'n]Y\h j]Y`Y'6Ygi W\Yf'Ub"

 $8]Y `B c f X k Y g h Z h`]g W Y b `@ U b [V U \backslash b a Y]g h Y f g W U Z h Y b `g] b X `Y] b `9 j Y b h Z X U g `V Y f Y] h g `] a `$U \ f `& $ %- `] a `: f Y] V U X `7 c V i f [`g h U h h Z U b X ž `k c `') ($

HY]`bY\a Yf`Ui g`&, 'JYfY]bYb'i a 'nU\`fY]W\Y`A YXU]``Yb'_Àa dZhYb"
Ni 'XYb'K YhhVYk YfVYb'[Y\ÒfYb'U``Yg'j cb'&\$\$!A YhYf!GhfYW_Yb'V]g
\]b'ni 'Gdf]bhX]gn]d`]bYb']b'Jcf`Ài ZYbž'VY]'XYbYb'g]W\'X]Y'VYghYb
gYW\g'GW\k]a a Yf'ZØf'XUg':]bU`Y'ei U`]Z]n]YfYb'_ÒbbYb"'8 Ug'\c\Y
B]j YUi 'i bX'X]Y'6Y[Y]ghYfi b['XYf'HY]`bY\a Yf'j YfgdfYW\Yb
gdUbbYbXY'K Yhh_Àa dZYž'i bX'Ni gW\Ui Yf'g]bX'\Yfn`]W\
Y]b[Y`UXYbž'X]Y'5h\`YhYb'Ubni ZYi Yfb' 'XYf'9]bhf]hh']gh'_cghYb`cg'

8 Ug: fY]VUX:`ÀX:'U``Y: DhYfYgg]YfhYb:Y]bž:bYVYb:XYa

K Yhh_Ua dZ[YgWXY\Yb:Ui WX:X]Y:nU\`fY]WXYb:: fY]nY]hUb[YVchY:]b

A ØbghYfg:: fY]VÀXYfb:ni: [Yb]Y»Yb": DZcfa Uh]cbYb:ni

2 ZZbi b[gnY]hYb:i bX:gdYn]Y``Yb:5b[YVchYb:g]bX:Ui Z:XYb

<a YdU[Yg:XYf:6ÀXYf:ni:Z]bXYb":: fYi Yb:k]f:i bg:Ui Z:Y]b

Ui ZfY[YbXYg:K cWXYbYbXY:]a:: fY]VUX:7cVi f[:gck]Y:]b:XYb

i a `]Y[YbXYb:GW:k]a a VÀXYfbž:k c:gck c\`gdcfh`]WXY

< OWXghY]ghi b[Yb:U`g:Ui WX:Yf\c`gUa Y:Ghi bXYb:]a:K UggYf:Ui Z

i bg:k UfhYb*

: Øf a Y\f' ⊕ Zcfa Uh]cbYb ni 'XYb': fY]VÀXYfb'i bX']\fYb'5b[YVchYb VYgi W\Yb'G]Y'X]Y'GY]hYb'XYf'GhUXh'A ØbghYf'cXYf'XYf'G; GW\k]a a Yb'A ØbghYf"

: Øf'U_hi Y``Y'BYk g'ØVYf'XUg': fY]VUX'7cVi f[ž'gWkUi Yb'G]Y'Ui Z'K B j cfVY]°

8 YhU]`g	
Cfh	A ØbghYfž'8 Yi hgWX`UbX
EiY``Yb	• k k k "k b"XY
	• gj YdY"XY
	k k k "ghUXh!a i YbghYf"XY

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