

? Ua dZi a 'K ØfXY. 'GW\k Yf_fUb_Y 'A Ua U hf]ZZh 'gW\k YfY '9b hgW\Y]Xi b[

A Y]_Y 'GW\YfYfž'' * ž'Ui g'C VYf\c ZYbž'_Àa d Zh'[Y[Yb '? fYVg i b X 'd`Ub hž']a '5i [i gh'Y]b Yb '`YhnhYb'I f`Ui V 'a]h']\fYb ?]b XYfb 'ni 'a UW\Yb"



CVYf\cZYbž'8Yi hgW\`UbX'!'AY]_Y'GW\YfYfžY]bY''*!A\f][Y
AihhYf'Uig'CVYf\cZYbž'\Uh'bUW\'Y]bYa '`Ub[Yb'?UadZ'[Y[Yb'XYb?fVg'X]Y'9bhgW\Y]Xib['[YhfcZYbž']\f'@YVYb'ni'VYYbXYb"'5iZ
GUiYfghcZZ'Ub[Yk]YgYb'ibX'[Yd`U[h'jcb'[YgibX\Y]h']W\YbDfcV`YaYbž\Uh'g]W\']\fNighUbX'gY]h'8YnYaVYf'&\$&''XfUaUh]gW\
jYfgW\`YW\hYfh"'=\b']\fYf'NY]h'a]h'XYf':Ua]']Y'aÒW\hY'g]Y']\fYb?]bXYfb'Y]bY'aÒ[`]W\gh']YVYjc``Y'9f]bbYfib['\]bhYf`UggYbž'VYjcfg]Y']\fYb'`YhnhYb'If`UiV']b'=\U`]Yb'd`Ubhž'XYf'ZØf'5i[ighjcf[YgY\Yb']gh"'8cfh'aÒW\hY'g]Y'a]h']\fYb'XfY]'?]bXYfb'ibX
XYfYb'JUhYf'kYfhjc``Y'AcaYbhY'jYfVf]b[Yb'ibX'\Uh'Y]b
If`UiVghU[YViW\'jcfVYfY]hYhž'ia']\fY';YXUb_Yb'ZYghni\U`hYb''

8 Y f @ Y] X Y b g k Y ['j c b 'A Y] _ Y 'G W X Y f Y f 'V Y [U b b ' & \$ % * ž ' b U W ' X Y f

; YVi fh']\fYg'Xf]hhYb'?]bXYg"'9]bY'8]U[bcgY'jcb; YVÀfa i hhYf\U`g_fYVg']a 'GYdhYa VYf'&\$&%'i bX'X]Y'XUfUi g fYgi `h]YfYbXYb'a YX]n]b]gW\Yb'9]b[f]ZZY'ZØ\fhYb'ni 'a Ugg]j Yb [Ygi bX\Y]h`]W\Yb'FØW_gW\`À[Yb"BUW\'a Y\fYfYb'CdYfUh]cbYbž VY]'XYbYb'HY]`Y']\fYf'9]YfghÒW_Y'i bX'XYf'_ca d`YhhY'8]W_XUfa YbhZYfbh'k i fXYbž']gh'g]Y'a]hh`Yfk Y]`Y'Ui Z'dUfYbhYfU`Y'9fbÀ\fi b[Ub[Yk]YgYb"'5i Z[fi bX'j cb'k]YXYf\c`hYb'H\fca VcgYb']gh'X]Yg YXcW\'b]W\ha Y\fa Ò[`]W\ž'i bX'g]Y'\Uh'VYgW\`cggYbž'_Y]bY k Y]hYfYb'a YX]n]b]gW\Yb'6Y\UbX`i b[Yb'cXYf'CdYfUh]cbYb'a Y\fni ni `UggYbž'UV[YqY\Yb'j cb'Y]bYf'GW\a Yfnh\YfUd]Y"

9bhgWXY]Xib[Yb*Ua *@YVYbgYbXY

 $K \]Y \ A \ Y] _Y \ GWX \ YfYfz \ X]Y \ VY] \ XYf \ Cf[\ Ub] gUh] cb \ @]bi g \ GhYfVY \] \ ZY \ 8 \ Yi \ hgWX \ Ub \ X \ Ub[\ Ya \ Y \ XYh \]ghz \ Yb \ hgWX \ Yb \ g]WX \ j \]Y \ Y \ A \ YbgWX \ Yb \ g]WX \ Yb \ G]hi \ Uh] cb \ Yb \ ZØf \ d \ Ugg] j \ Y \ GhYfVY \] \ ZY''' \ 8 \]YgY \]gh \]b \ 8 \ Yi \ hgWX \ Ub \ X' \ f \ f]gh]gWX \ 'ni \ `Agg] [\ z \ k \ A \ fYb \ X'U \ h]j \ Y \ GhYfVY \] \ ZY \ j \ YfVchYb \]gh''' \ 9h \]gWX \ Y \ , \ VYf \ Y[\ i \ b[\ Yb \ gd] Y \ Yb \]b \ gc \ `WX \ Yb \ 9b \ hgWX \ Y]Xi \ b[\ Yb \ Y]b \ Y \ K \]WX \ h][\ Y'F \ c \ `Y''' \ 8 \]Y'' \ ? \ ca \ a \ i \ b] \ Uh] cb \ 'a \ Y] \ Yb \ GWX \ YfYfg \ : \ U \ \ 'fYU[\]YfhYb \] \ YY \ ? \]b \ XYf' \ bhYfgWX \]YX \]WX \ Ui \ Z'] \ YfhfUi \ hYb \ 9b \ hgWX \ i \ gg/\ g]Y' \ k \ Øb \ gWX \ Yb \ g]WX \ z' \ XUgg \] \ YY'' \ A \ i \ hhYf']b \ XYf' j \ YfhfUi \ hYb \ I \ a \ [\ YVi \ b[\]) \ fYg''Ni \ \ Ui \ gY'] \ Yfh \ "YhnhYb \ 5hYa \ ni \ [\ 'a \ UWX \ h"$

DU``]Uh]j j Yfgcf[ib['ibX'@YVYbgeiU`]hÀh

8]Y'dU``]Uh]j Y'JYfgcf[ib['n]Y`h'XUfUiZ'UVŽ'X]Y'@YVYbgeiU`]hÀh
gWk Yf_fUb_Yf'gck]Y'ghYfVYbXYf'A YbgWkYb'ni 'j YfVYggYfb"
N]Y`[fiddYb'g]bX'b]Wkh'bif'9fk UWkgYbYž'gcbXYfb'UiWk'?]bXYf
ibX'\$i[YbX`]WkY'a]h``YVYbgVYXfc\`]WkYb'9f_fUb_ib[Yb"'*+0
8YihgWk`UbX'k]fX'X]Y'DU``]Uh]jjYfgcf[ib['XifWk'?]bXYf!'ibX
\$i[YbXAfnhY'gck]Y'gdYn]U`]g]YfhY'UaVi`UbhY'DU``]Uh]jjYfgcf[ib[
Ub[YVchYb"'8]YgY'kifXYb'gY]h'&\$\$+'U`g'?UggYb`Y]ghib[
UbYf_Ubbh''8]Y'JYfgcf[ib['iaZUggh'b]Wkh'bif'X]Y
gmadhcaUh]gWkY'6Y\UbX`ib[ž'gcbXYfb'UiWk'Y]bY'6Y[`Y]hib['UV
XYf'8]U[bcgY'V]g']bg'9fkUWkgYbYbU`hYf''K]Wkh][Y'GWkkYfdib_hY
g]bX'X]Y'?cbhfc``Y'_OfdYf`]WkYf'GmadhcaY'k]Y'GWkaYfnYb'ibX

5 hYa bch"'Cd]c]Xh\YfUd]Y'gd]Y`h'cZh'Y]bY'nYbhfU`Y'Fc``Yž'Ui W\k Ybb'BYVYbk]f_i b[Yb'k]Y'CVgh]dUh]cb'i bX'A ØX][_Y]h'Ui ZhfYhYb_\ObbYb"

cfgWki b[gdfcY_hY']a '6YfY]Wk 'XYf'DU``]Uh]j a YX]n]bž'[YZÒfXYfh j ca '6i bXYga]b]ghYf]i a 'ZØf'6]`Xi b['i bX': cfgWki b['fl6A 6: Łž n]Y`Yb'Ui Z'X]Y'JYfVYggYfi b['XYf'JYfgcf[i b['j cb'DUh]YbhYb'UV"'9g k YfXYb'ei U`]hUh]j Y'i bX'ei Ubh]hUh]j Y'A Yh\cXYb'Y]b[YgYhnhži a X]Y'@YVYbgei U`]hÀh'XYf'6YhfcZZYbYb'ni 'ghY][Yfb"'H\Ya Yb'k]Y'X]Y dfcU_h]j Y'DU``]Uh]j j Yfgcf[i b['cXYf'Ui Wk'X]Y'6Y['Y]hi b[']b'XYf 'YhnhYb'@YVYbgd\UgY'g]bX'j cb'\c\Yf'FY`Yj Ubn'i bX'k YfXYb'Xi fWk]bhYfX]gn]d`]bÀfY': cfgWki b[gdfcY_hY'UXfYgg]Yfhž'i a 'X]Y < YfUi gZcfXYfi b[Yb']a '6YfY]Wk'XYf'DU``]Uh]j a YX]n]b'YZZY_h]j Yf'ni VYk À'h][Yb"

 $A Y]_Y GWXYfYf ``Uh'g]WX ``Ui WX ``VY]'] ` fYb' @YgYfb'j cb'XYf GWX k ÅV]gWXYb'NY]hi b[``VYXUb_hž'X]Y'g]Y'Ui Z'] ` fYa 'gWX k YfYb K Y['i bhYfghØhnh'\UVYb''' <math>\Rightarrow$ fY'; YgWX]WX hY']gh'Y]b'Y]bXf]b[``]WXYf 5ddY``'ZØf'a Y\f'JYfghÅbXb]g'i bX'I bhYfghØhni b[']b'XYf DU``]Uh]j j Yfgcf[i b[ž'i bX'g]Y'nY][hž'k]Y'k]WX h]['Yg']ghž'X]Y K ØbgWXY'i bX'6YXØfZb]ggY'j cb'DUh]YbhYb'i bX'XYfYb': Ua]`]Yb']b XYb'A]hhY`di b_h'ni 'ghY``Yb''

8 YhU]`g	
JcfZU``	; Ygi bX\Y]hg_f]gY
Cfh	CVYf\cZYbž'8YihgW\`UbX
EiY``Yb	• k k k "g\\\ k UYV]g\\\ Y"XY
	• da WbWW]"b`a "b]\"[cj
	• kkk"[YgibX\Y]hgZcfgW\ib[!
	Va VZ"XY

6 Ygi W Yb G Y i bg Ui Z b! U ["b Yh