

: `U[[Yb!<]ggi b['Ub'GW\i `Yb. ?cbhfcj YfgY'i a '5Z8!6YgW\`i gg']a >\f]W\ck Yf'@UbX

a '≯f]Wkck Yf'@UbX'\]ggYb'GWki `Yb'X]Y'8 Yi hgWk`UbXZU[[YbUWk'Y]bYa '?fY]ghU[gVYgWk`i gg"'8 Yf'GWkf]hh'YfZc`[h'bUWk5Z8!5bhfU['i bX'gcf[h'ZØf'?cbhfcjYfgYb"



DUfhY]ž·gcbXYfb·Ui W. j cb·XYf·GD8 "·?f]h]_Yfž·]bgVYgcbXYfY·X]Y @|b_Yž·Ài » YfhYb·6YXYb_Yb·i bX·gU\Yb·X]Y·Ni gh]a a i b[·XYf·78IU`gʻdfcV`Ya Uh]gW\"·8]Y·5Z8·k]fX·j ca ˈJ YfZUggi b[ggW\i hn·]b GUW\gYb!5b\U`h·U`gʻ[Yg]W\Yfh·fYW\hgYI hfYa]gh]gW\'Y]b[Yghi Zh''

8Yf'FibXYf`Ugg'XYg' \bYba]b]ghYf]iag'j cb'GUW\gYb!5b\U`h
fY[Y`h'X]Y'6YZU[[ib['Ub'ghUUh`]W\Yb'8]Ybgh[YVÀi XYbž'k c'bif
j cf'XYb'cVYfghYb'@UbXYgVY\ÒfXYb'ibX'XYa'@UbXhU['fY[Y`aÀ»][
X]Y'8Yi hgW\`UbX!ž'9i fcdU!'ibX'@UbXYgZU[[Y'[Y\]ggh'k]fX"':Øf
bUW\[YcfXbYhY'@UbXYgVY\ÒfXYb'YfZc`[Yb'6YZU[[ib[Yb'bif'Ub
VYgh]aahYb'HU[Yb"'\b'X]YgYa'?cbhYlh']gh'X]Y'dYfaUbYbhY
6YZU[[ib['_caaibU`Yf'@]Y[YbgW\UZhYb'fYW\h`]W\'ibVYXYb_`]W\"

$?f]h]_i b X [YgY``gWX UZh`]WX Yf?cbhYlh$

8]Y 5Z8 ZcfXYfhY]b]\fya 5bhfU['Y]bY Bcfa U`]g]Yfi b[']a
I a [Ub['a]h B Uh]cbU`gma Vc`Ybž'XU'g]Y 'Y]bYb A Ub[Y``Ub
; Ya Y]bg]bb]b `XYf'; YgY``gWX UZh ZYghghY``hY" 8]YgYg'H\Ya U'k]fX
j cf'XYa '<]bhYf[fi bX XYfnY]h][Yf'< YfUi gZcfXYfi b[Yb 'VYnØ[`]WX
bUh]cbU`Yf'=XYbh]hÀh i bX `Ni [Y\ Of][_Y]h X]g_i h]Yfh" 8 Ug'D9K !
: cfgWXi b[gnYbhfi a '\ Uh']b 'Y]bYf'I a ZfU[Y `ni f'bUh]cbU`Yb '=XYbh]hÀh
]b '%('@ÀbXYfbž'Y]bgWX `]Y » `]WX '8 Yi hgWX `UbXž'ZYgh[YghY``hž'XUgg
k À\ fYbX '\ c\ Yf'A][fUh]cbg! 'i bX': `ØWX h`]b[gVYk Y[i b[Yb
j YfgWX]YXYbY': U_hcfYb 'X]Y '5bYf_Ybbi b['U`g'HY]``XYf'; YgY``gWX UZh
VYY]bZi ggYb"

9]b 'nYbhfu`Yg'9`Ya Ybh']gh'X]Y'6Y\YffgW\ib['XYf'@UbXYggdfUW\YžX]Y'+) 'DfcnYbh'XYf'6YZfU[hYb'U`g'k YgYbh`]W\'ZØf'X]Y'+bhY[fUh]cb YfUW\hYb"'?i `hi f'i bX'bUh]cbU`Y'HfUX]h]cbYb'gd]Y`Yb'YVYbZU``g'Y]bY Fc``Yž'k Ybb[`Y]W\'X]Y'XYi hgW\Y' @Y]h_i `hi f']bhYfbUh]cbU``ZØf'((DfcnYbh'XYf'6YZfU[hYb'gW\cb'k]W\h][ž'YXcW\'bi f'ZØf'&' 'DfcnYbh U`g' gY\f'k]W\h]['Y]b[Yghi Zh'k]fX"'+b'Y]b][Yb'cghYi fcdÀ]gW\Yb @AbXYfb'k]fX'X]Y'bUh]cbU`Y'?i `hi f'i bX'HfUX]h]cb'XYi h`]W\'ghÀf_Yf [YgW\Ahnh'U`q']b'8Yi hgW\`UbX"

8 UgʻH\Ya UʻFY`][]cbʻk]fX`]bʻXYfʻ8 YVUhhYʻi aʻbUh]cbUʻYʻ≠XYbh]hÀh Ub[YgdfcW\YbžʻcVk c\``bi fʻ%%ʻDfcnYbhʻXYfʻ8 Yi hgW\Ybʻ]\f 7\f]ghgY]bʻU`gʻ gY\f`k]W\h]['YfUW\hYb"'8]YgʻnY][h'Y]bYb ; YbYfUh]cbgi bhYfgWk]YX. '\(\Delta b \) [YfY '6Y\(ZfU \) [hY 'a YggYb 'XYf'FY'] []cb [YbYfY``'k Yb] [Yf'6YXYi hi b ['VY]'U`g'\(A\) hYfY"'8]YgY '9f_Ybbhb]ggY j YfXYi h`]WkYb'X]Y'?ca d`Yl]h\(Ah'XYf'bUh]cbU`Yb'\(\Rightarrow XYbh]h\(Ah')b'Y]bYa ni bY\a YbX'a i `h]_i `hi fY``Yb'9i fcdU"

Ni gUa a YbZUggYbX'VYhfUW\hYhž'j Yfk YVYb'g]W\: fU[Yb'ni fbUh]cbU`Yb'=XYbh]hÀhž'; Ya Y]bg]bb'i bX'ni f'Bi hni b['j cbBUh]cbU`gma Vc`Yb'Ui Z'j YfgW\]YXYbY'K Y]gY']b'X]Y'U_hi Y``Y
[YgY``gW\UZh`]W\Y'8YVUhhYž'b]W\h'ni `Yhnh'Xi fW\'X]Y'_cbhfcj YfgYb9bhgW\Y]Xi b[Yb'k]Y'X]Y'6YZU[[i b[']b'GUW\gYb!5b\U`h"8]Y
YfUi gZcfXYfi b['V`Y]Vhž'k]Y'[YgY``gW\UZh`]W\Y'=bhY[fUh]cb[Y`]b[Yb'_Ubbž'kÀ\fYbX'i bhYfgW\]YX`]W\Y'DYfgdY_h]j Yb'Ui ZbUh]cbU`Y'=XYbh]hÀh'i bX'Ni [Y\Of][_Y]h'kY]hYf\]b'VYghY\Yb"

 $: \emptyset f'XYhU]^{``}YfhY' + Zcfa Uh]cbYb' \emptyset VYf'XYb' 6YgWX`i gg']a ' * Xf]WXck Yf @UbX'VYgi WXYb'G]Y'K Y`h'i bX'Z\IDFY]bY'i a ZUggYbXYfY' 5bU`mgY'XYf bUh]cbU`Yb' + XYbh]h\Ah'`Y]hYb'k]f'G]Y'ni': ck]X'''$

8 YhU]`g	
J c f ZU``	Gcbgh][Yg
Cfh	Xf]WN.ck.Yf"@UbXž"8Yi.hgWN.`UbX
EiY``Yb	• k k k "k Y`h"XY
	• Zck]X"XY

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