

VYfY]hdZY[Y']b'@Ycdc\XghUXh.'NkY]hYf D\Uhn'VY]a'K = 9J!5kUfX'&\$&)°

5a '&' "\$*"&\$&) 'YffUb['X]Y', VYf`Y]hdZY[Y'GhUh]cb'@ gh\Ui g]b'@Ycdc`XghUXh'XYb'&"'D`Uhn'ZØf']bbcj Uh]j Y DUh]YbhYbVYhfYi i b["



@Ycdc`XghUXhž'² ghYffY]WX '!'9]b 'Yf\YV`]WX Yf'GWXf]hh'ni f

J YfVYggYfi b['XYf'; Ygi bX\Y]hgj Yfgcf[i b[']b 'K]Yb 'k i fXY' 'Øb[gh
Xi fWX 'XUg'Dfc'Y_h', VYf'Y]hdZY[Y'GhUh]cb'@igh\Ui g 'Ui g'XYf

DZY[Y'@Ycdc`XghUXh'[Yk ØfX][h''6Y]'XYf'J Yf'Y]\i b['XYg'K \(\Rightarrow \text{9J} \)
5k UfXg'&\$&) 'VY'Y[hY'XUg']bbcj Uh]j Y'?cbnYdh'XYb'nk Y]hYb'D`Uhn
]b 'XYf'? UhY[cf]Y' A YbgWXYb'j Yf`Agg`]WX'VY[`Y]hYb 'i bX'nY][h
Y]bXfi W_gj c``ž'k]Y'Vm'X]Y'A YX]n]b'j Yf_bØdZh'k YfXYb'_Ubb''@Ui h'
[Ygi bX\Y]hgj YfVi bX"Uh'k i fXY'X]Y', VYf`Y]hdZY[YghUh]cb'&\$&(
]bg'@YVYb'[Yfi ZYbž'i a 'X]Y'Cfh\c!HfUi a U!5VhY]'i b['XYf'?`]b]_
8cbUi ghUXh'ni 'Ybh'UghYb''

 $A]h^*\&(``6YhhYb^*V]YhYh^*X]Y^*GhUh]cb^*Y]bYb^*D`Uhn^*ZØf^*DUh]Ybhi^]bbYbž XYfYb^*5_i hVY\UbX`i b[``UV[YgWX`cggYb^*]ghž^*X]Y^*YXcWX^*k Y]hYfY$

6YhfYiib['VYbÒh][Yb"'Gc'gcf[h'XUg'Dfc'Y_h'XUZØfž'XUgg
Gd]hU`gVYhhYb'nY]h][Yf'ZØf'a YX]n]b]gW\Y'5_i hj Yfgcf[ib['nif
JYfZØ[ib['ghY\Yb'ibX'DUh]Ybhl]bbYb'Y]bY'bU\h`cgY
5bgW\`iggVY\UbX`ib['ibhYf'Àfnh`]W\Yf'5i Zg]W\h'nihY]`k]fX"'8]Y
JYfUbhk cfhib['XUZØf'hfU[Yb'Y]b'Yb[U[]YfhYg'HYUa'ia'\dday UbU
@UnUfYj]WZAUf]bU'\Jb'ibX'j]Y`Y'UbXYfY"

BU\h`cgY`Ni gUa a YbUfVY]h`]a ; Ygi bX\Y]hgk YgYb

 $8 cW. k]Y Z b_h]cb]Yfh XUg [YbUi 3:8 i fW. X]Y 9]bZ h fi b[Y]bYf UV[Yghi ZhYb J Yfgcf[i b[k YfXYb J Yfgcf[i b[g`ØW_Yb [YgW.`cggYb i bX ??`]b]_Yb Ybh`UghYhž gc ``UnUfi g"Uh" DUh]Ybh]bbYbž X]Y bUW Y]bYa '5 i ZYbh\U`h']a '?fUb_Yb\Ui g'_Y]bY YI hYfbY ?i fnnY]hdZY[Y Z]bXYbž k YfXYb]b XYb DZY[Y\Ai gYfb XYg K]YbYf ; Ygi bX\Y]hgj YfVi bXYg fK <math>=$ 9JE i bhYf[YVfUW h"8]YgY g]bX Ui Z a YX]n]b]gW Y i bX h\YfUdYi h]gW Y 9I dYfh]gY gdYn]U`]g]Yfh i bX ghY\Yb 'U`g'GcbXYf_fUb_YbUbghU`hYb ni f'JYfZ0[i b["

 $8 \ Ug' Ub [\ YghfYVhY'N]Y`']gh'Y]bY'ZfØ\ nY]h][\ Y'9bh'Uggi b[\ 'XYfDUh]Ybh']bYb']b'Y]b'YdUggYbXYg'Ni \ Ui gY'cXYf']b'Y]bY'[\ YY][\ bYhYKY]hYfj Yfgcf[i b["'9]b'k Y]hYfYf'D`i gdi b_h.'8]Y'HfUbgZYfg]bbYf\U`V'k Yb][\ Yf'HU[\ Y'YfZc`[\ Yb'c\bY'VØfc_fUh]gW\ Y'<ØfXYb'''Gc gcf[\ h'XUg'A\ cXY``'b]W\ h'bi\ f'ZØf'Y]bY'9bh`Ughi\ b['XYf'?`]b]_YbZ gcbXYfb'ghY``h'Ui\ W\ 'g]W\ YfZ'XUgg'X]Y'DUh]Ybh']bbYb'VYgha\ O[`]W\ VYhfYi\ h'k\ YfXYb'''$

Ni _i b Zhgcf]Y b h]Y f hY 'D `Ubi b ['i b X E i U `]h À hgg]W \ Y f i b [

8]Y; fØbXY'ZØf'X]YgY']bbcj Uh]j Y'<YfUb[Y\Ybgk Y]gY'g]bX
j]Y`ZÀ`h]["'Ÿ`hYfY'DUh]Ybhł]bbYbž'X]Y'j cb'_ca d`Yl Yb
a YX]n]b]gW\Yb'6Y\UbX`i b[Yb'Yf\c`Ybž'VYbOh][Yb'cZh'Y]bY
]bhYbg]j YfY'BUW\gcf[Y"'<]Yf'gYhnh'XYf'2 ghYffY]W\]gW\Y
Ghfi _hi fd`Ub'; Ygi bX\Y]h'fP G; Ł'Ubž'XYf'gY]h'&\$%' 'X]Y']bhY[fUh]j Y
J Yfgcf[i b[gd`Ubi b[']b'2 ghYffY]W\ 'ZÒfXYfh"'9f'X]Ybh'XYf
ghfi _hi f]YfhYb'D`Ubi b['XYf'; Ygi bX\Y]hgj Yfgcf[i b['i bX'gc``

[Yk À\f`Y]ghYbž'XUgg'X]Y'E i U`]hÀh'ZØf'X]Y'DUh]Ybhł]bbYb'[Yg]W\Yfh V`Y]Vh"'K]Y'Ui Z'[Ygi bX\Y]h"[j "Uh'ni '`YgYb']ghž'k YfXYb'XUXi fW\ , VYf!ž'I bhYf!'cXYf': Y\`j Yfgcf[i b[Yb'k Y]hYgh[Y\YbX'j Yfa]YXYb"

8]Y'ØVYfUfVY]hYhY'JYfg]cb'XYg'2 G; '&\$&' 'gYhnh'Y]bYb'_`UfYb: c_i g'Ui Z'Y]bY'Ui g[Yk c[YbY'i bX'[i h'YffY]W\VUfY; Ygi bX\Y]hgj Yfgcf[i b["'5i W\X]Y'8Ya c[fUd\]Y'i bX Yd]XYa]c`c[]gW\Y'9bhk]W_`i b[Yb'YfZcfXYfb'Y]bY'_cbh]bi]Yf`]W\Y 5bdUggi b['XYf'; Ygi bX\Y]hgj Yfgcf[i b[ž'k Ug'X]Y'K]W\h][_Y]h'j cbDfc'Y_hYb'k]Y'XYf', VYf`Y]hdZY[Y'k Y]hYf'i bhYfghfY]W\h"

8i fW. X]Y [Ygi bXY A]gW.i b['Ui g'_`]b]gW.Yf'J Yfgcf[i b['i bX ghfUhY[]gW.Yf'D`Ubi b['nY][h'K]Ybž'XUgg'a Ub']b'XYf
; Ygi bX\Y]hgj Yfgcf[i b['Y]b'[i hYg'< ÀbXW.Yb'\Uh"'GW.Ui h'a Ub
Ui Z'X]Y 'dcg]h]j Yb'F ØW_a Y`Xi b[Yb'Ui g'?`]b]_Yb'i bX
DZY[Y\Ài gYfbž'ghY\h'ZYgh'8]Y'Ni _i bZh'XYg'; Ygi bX\Y]hgk YgYbg
\]Yfni `UbXY']gh'Ui Z'Y]bYa 'j]Y`j YfgdfYW.YbXYb'K Y["

| 8 YhU]`g | |
|----------|---------------------------------------|
| Cfh | @Ycdc`XghUXhž ^{·2} ghYffY]WX |
| EiY``Yb | • [Ygi bX\Y]hgj YfVi bX"Uh |
| | • k k k "`UnUfi g"Uh |
| | • k k k "[Ygi b X \ Y]h"[j "Uh |

6Ygi WXYb G]Y i bg Ui Z a Y]b!k]Yb bYh