

8]Y[c'Dcch\.'Jca'; c`ZdfcZ]'ni a 8UbW]b['GhUf''9]b'5i Zgh]Y['jc``Yf G_UbXU`Y°

8]Y[c'Dcch\ž'XYf'Gc\b'XYf'9bhYfhU]bYf]b'JYfcbU'Dcch\ž ØVYffUgWkh'VY]'@Yh/;\$'-/g'8UbWY'&\$&)'a]h'gY]bYa'G]Y[ibX'Y]bYf'VYkY[hYb'JYf[Ub[Yb\Y]h"



 $8]Y[c.\h]yfY]hg.Y]b][Y.VYa.Yf_Ybgk.YfhY.9fZU\fi.b[Yb.[Ya.UW.h.]$

=a '5`hYf'j cb'%) '\$J\fYb'Yfk UfV'Yf'gY]bYb'A cZU!: Ø\fYfgW\Y]bž cVk c\`'Yf'VY]'XYf'6Ybi hni b['Y]bYf'Zf]g]YfhYb'A cZUž'X]Y'V]g'ni '%&+
_a #\`gW\bY``'k Ufž'ZØf'&) 'Gcn]U`ghi bXYb'j Yfi fhY]`h'k i fXY"'GY]bY

\$\forall [YbX'k Uf'b]W\h']a a Yf'Y]bZUW\/'Yf'k i fXY'j cb'Y]bYf

fYbca a]YfhYb'9`]hY!I b]j Yfg]hÀh']b'XYb'I G5'gi gdYbX]Yfhž

bUW\XYa 'Yf'\Y]a `]W\'Y]b'8]bYf'k À\fYbX'XYf'7cfcbU!DUbXYa]Y

VYgi W\h'\UhhY"'8YbbcW\'nY][h'Yf'g]W\'U`g'Y]b'hU`Ybh]YfhYf'; c`ZYf

i bX'gW\`cgg'YfZc`[fY]W\'X]Y'<][\'GW\cc`'Ub'Y]bYa '9`]hY!; c`Z

\$\ph\fbUh']b'XYb'J YfY]b][hYb'GhUUhYb'UV"

$8]Y'HY]`bU\a Y'Ub' @Yhg'8UbW$

&\$&) 'hfUh'8]Y[c']b'XYf'%, "'GhUZZY``XYf'FH@!HUbng\ck' @Yhg
8UbW 'Ui Zz'k c'Yf'ni gUa a Yb'a]h'XYf'DfcZ]hÀbnYf]b'9_UhYf]bU
@Ycbcj U'i a 'XYb'H]hY``_Àa dZhY"'I fgdfØb[`]W\'nÒ[YfhY'Yfž'Ub'XYa
K YhhVYk YfV'hY]`ni bY\a Yb'i bX'ØVYf`Y[hYž'gY]bY'5bZfU[Y
UVni `Y\bYb"'BUW\'Y]bYf'BUW\h'XYg'BUW\XYb_Ybg'YbhgW\]YX'Yf
g]W\'YXcW\'i a 'i bX'hfUh'gW\']Y»`]W\'Ub"'=a ':]bU`Y'a]h', +'Di b_hYbž
Y]bgW\`]Y»`]W\'XYf'<ÒW\ghk Yfhi b['j cb'' \$'Di b_hYb'ZØf'XYb'7\U!
7\U!7\U'i bX'XYb'`Ub[gUa Yb'K U`nYfž'_cbbhY'Yf'XYb'H]hY`
8 UbW]b['GhUf 'Yff]b[Yb"', VYffUgW\YbXYfk Y]gY'gYhnhY'Yf'g]W\
[Y[Yb'X]Y'?cb_i ffYbhYb': UV]Ub'<Ua VØW\Yb'i bX'HU`]gc'9b[Y`
Xi fW\'z'cVk c\`X]YgY']b'XYb'ZfØ\YfYb'Fi bXYb'a Y\f'Di b_hY'Yfn]Y`h\UhhYb"

Ni gàhn`]W\ `ni `gY]bYf`8 UfV]Yhi b[`]b`XYf`HUbng\ck `\Uh`8]Y[c`Ui W\]b'j YfgW\]YXYbYb'I bhYf\U`hi b[gZcfa UhYb'a]h[Yk]f_hž'XUfi bhYf ; f]```XYb'<Ybgg`Yf `i bX`X]Y', \$Yf!G\ck `VY]`C`]j Yf'; Y]ggYb'' 8]YgY`5i Zhf]hhY'hfi [Yb`XUni `VY]ž'gY]bY`6Y_Ubbh\Y]h'U`g` \oplus Zi YbWf Ui Z'GcW]U`A YX]U`ni `ghY][Yfb''8]Y[c`]gh'Ui Z'D`UhhZcfa Yb`k]Y \oplus bghU[fUa `U_h]j ž'k c`Yf'gY]bY': Ubg'a]h'9]bV`]W_Yb']b'gY]b'@YVYb i bX`gY]bY`Dfc Y_hY'j Yfgcf[h''

I bhYfbY\a Yf]gW\Y`5a V]h]cbYb`i bX A cXY`UVY`

 $5i\ Z'[YgWAZh]WXYf'9VYbY'\Uh'8]Y[c'Dcch\'Y]b'AcXY`UVY`bUaYbg$

H\i bXYf'Ghi X]cg '[Y[fØbXYhž'XUg'Yf'[Ya Y]bgUa 'a]h'gY]bYa
J UhYf': fUb 'c 'ZØ\fh'' '8 Ug'@UVY` 'Ybhk]fZh'H!G\]fhg'i bX' < ccX]Ygž'X]Y
]b 'XYf'A cXYk Y`h'Ui Z' \DhYfYggY'ghc >> Yb "'8 UfØVYf'\]bUi g'UfVY]hYh'Yf
Ub 'Y]bYa 'Y][YbYb'GhUfhi d'ZØf'BU\fi b[gYf[Àbni b[ga]hhY`ž'XUg
ØVYf'+) 'j YfgWX]YXYbY' \D\U`hgghc ZZY'i a ZUggh'i bX'XYa 'N]Y` 'X]Ybhž
XYb'J YfVfUi WXYfb'[Yqi bXY'C dh]cbYb'Ubni V]YhYb"

K À\fYbX'gY]b'K Y['j c``Yf'<YfUi gZcfXYfi b[Yb'k Ufž'nY][h'8]Y[c Y]bY'VYY]bXfi W_YbXY'9bhgW\`cggYb\Y]hž'X]Y']b'gY]bYb j YfgWX]YXYbYb'Dfc'Y_hYb'ni a '5i gXfi W_'_ca a h''GY]bY'HY]`bU\a Y Ub' @Yh g'8 UbW' 'k Uf'b]WXh'bi f'Y]b'GWXf]hh'Ui g'gY]bYf ?ca ZcfhncbYž'gcbXYfb'Ui WX'Y]bY'; Y`Y[Yb\Y]hž'gY]bY HUbnZÀ\][_Y]hYb'i bX'gY]bYb'I bhYfbY\a Yf[Y]gh'Y]bYf'VfY]hYb 2 ZZYbh`]WX_Y]h'ni 'dfÀgYbh]YfYb'''8]Y[c'Dcch\']gh'gca]h'Y]b ZUWYhhYbfY]WXYf'5_hYi f']b'XYf'XYi hgWXYb I bhYf\U`hi b[g`UbXgWXUZhž'XYf'gY]bY'Ni _i bZh'a]h'GdUbbi b['i bX 9b[U[Ya Ybh'[YghU`hYh']

: Øf'k Y]hYfY' +b Zcfa Uh]cbYb' ØVYf'8]Y[c'Dcch\'_ÒbbYb'G]Y'X]Y' GUUfVfØW_Yf'NY]hi b[ž'%/%'i bX'?c`qei UfY'VYqi W\Yb"

8 YhU]`g	
Cfh	6Yf`]bž'8Yi hgW\`UbX
EiY``Yb	k k k "gUUfVfi YW_Yf!nY]hi b["XY
	• \ca Y"%i bX%"XY
	• k k k "_c`gei UfY"Wca

6 Y gi W Y b 'G] Y 'i b g 'U i Z 'b ! U ["X Y