

JYfVfUi WXYfgWXi hn. 'Fi bXZi b_[YVØ\fYb! DcfhU`'dfY``h'ZUgh'%\$\$"\$\$\$'6Øf[Yf

JYfVfUi WYfnYbhfU`Y`k Ufbh'j cf`Fi bXZi b_[YVØ\fYb!: U``Y. VYf'-\$"\$\$\$'JYfVfUi WXYf'VYhfcZZYbž'; Y`XfØW_nU\`i b[Yba`O[`]WX"

8]Y 'Øb[ghYb'9bhk]W_`i b[Yb'fi bX'i a 'X]Y 'Fi bXZ b_[YVØ\fYb\UVYb'ZØf'5i ZfY[i b['[Ygcf[h"'9]bY'+bhYfbYhgY]hY'\Uh'g]W\'U`g: U``Y'ZØf'JYfVfUi W\Yf'Ybhdi ddhž'X]Y'g]W\'bUW\'+bZcfa Uh]cbYb'ni fFi bXZi b_[YVØ\f'Yf_i bX][Yb"NY\bhUi gYbXY'A YbgW\Yb'_ObbhYb\UYhfcZZYb'gY]b'i bX'bi b'Ui Z'Ybh[Ub[YbYg'; Y`X'\cZZYb"

FibXZib_[YVØ\f'Yf\ \dot{O} \h' 'JYfVfUi W\Yf']b XYf'Nk]W_a Ø\`Y

8]Y'Fi bXZi b_[YVØ\f`ghY``h`ZØf`j]Y`Y'6Øf[Yf]bbYb'i bX'6Øf[Yf`Y]b
`Y]X][Yg'H\Ya U'XUfž']bgVYgcbXYfY'bUW\'XYf`_Øfn`]W\Yb'9f\O\i b[
XYg'6Y]hfU[g"'Gca]h`gY\Yb'g]W\'X]Y'A YbgW\Yb'ni gÀhn`]W\'ni 'XYb
U``[Ya Y]bYb'@YVYbg\U`hi b[g_cghYb'a]h`X]YgYf`DZ]W\hnU\`i b[
_cbZfcbh]Yfh"'9]b'I a ni ['cXYf'Y]bY'ŸbXYfi b['XYf'6Ub_j YfV]bXi b[
YfZcfXYfh'j cb'XYb'6YhfcZZYbYb'X]Y'A Y`Xi b['Ub'XYb
YbhgdfYW\YbXYb'6Y]hfU[ggYfj]W\Z'k Ug'VYXYi hYhz'XUgg'g]Y'cZh
bUW\'@Ogi b[Yb'gi W\Yb'a ØggYb"

=bhYfbYhZU``Y`Ybhdiddh'g]WX`U`g`_cghgd]Y`][

8]Y'JYfVfUi WXYfnYbhfU`Y'GUWXgYb!5b\U`h'\Uh'VY_Ubbh[Y[YVYbž XUgg'X]Y'GGG!GcZhk UfY'GdYW]U`'GYfj]WY'; a V<ž'X]Y'X]Y'K YVgY]hY k k k "gYfj]WY!fi bXZi b_VY]hfU["XY'VYhfY]Vhž'k Y[Yb'i b`Ui hYfYb DfU_h]_Yb'UV[Ya U\bh'k i fXY"'8Yf'Jcfk i fZ', VYf'-\$"\$\$\$ JYfVfUi WXYf'\UVYb'V]g'A]hhY'\$\rightarrow\$`]'&\$&('Yhk U'&-ž-'9i fc'[YnU\`hž

bi f'i a ']\fY'8 UhYb'Ui Z'X]YgYf'gW\Y]bVUf'cZZ]n]Y``Yb'GY]hY'ni ØVYfa]hhY`b"'8]YgY'NU\`i b['k Uf'U``YfX]b[g'b]W\h'_`Uf'i bXhfUbgdUfYbh'[Ybi ['[Y_YbbnY]W\bYhž'gcXUgg'j]Y`Y'A YbgW\Yb'c\bY]bZcfa]YfhY'Ni gh]a a i b[']b'X]Y'?cghYbZU``Y'[YhUddh'g]bX"

FYWN hgk]Xf][_Y]hYb i bXi b`Ui hYfYf K YhhVYk YfV

Ni gÀhn`]W\ni fii bfYW\ha \A\\][Yb?cghYbdZ]W\hik]fX`XYb`5; 6`XYf GY]hY`a Ub[Y`bXY`HfUbgdUfYbn'j cf[Yk cfZYb"'8]Y`JYfVfUi W\Yf \UhhYb`V]g`ni f`5bdUggi b[`XYf`6YX]b[i b[Yb`Ua`&, "`\\$\ b]`&\&(gW\Y]bVUf`i b[\Ø`h][Y`9]bk]``][i b[Yb`YfhY]`hž`XU`g]Y`b]W\h'_cffY_h \\ØVYf`]\f`K]XYffi \ZgfYW\h'VY`Y\fh`k i fXYb"'8]Y \JYfVfUi W\YfgW\\ØhnYf`gY\Yb`X]Yg`U`g`i bni `\Agg][Y`DfUl]g`Ub`i bX\UVYb`X]Y`A\O[`]W_Y]hY]bYf`GUa\a\Y`_`U[Y`Ub[YXfc\h"

I bhYfbY\a Yb fYU[]Yfh Ui Z XYb 8fi W_

 $8]Y'5VaUVbib[``Vuh'cZZYbVUf'gWVcb'YfghY': fØWVhY'[YhfU[Yb.'8]YGGG!GcZhkUfY'; aV<``Vuh'Ub[Y_ØbX][hž'FØW_YfghUhhib[YbjcfnibY\aYb'']+bgVYgcbXYfY'X]Y'JYfVfUiWVYfž'X]Y'a]h'XYf'YfghYb: Uggib[`XYf'5; 6']b'X]YgY'a]gg`]WVY'@U[Y'[YfUhYb'g]bXž'_<math>ObbYb$]\fY'5bgdfØWVY'dYf'9!AU]`'[Y`hYbX'aUWVYb''8]Yg'V]YhYhnia]bXYgh'Y]b][Yb'; YgWVÀX][hYb'<cZZbib['UiZ'9fghUhhib['']

: Un]h. K $WX h][Y'@Y \ fY'ZØf'J Y fV fUi WX Y f$

8]Y 'U_hi Y``Y 'G]hi Uh]cb 'nY][h'XYi h`]W\ž'k]Y 'k]W\h]['K UW\gUa_Y]h
]a '\DhYfbYh`]gh''J YfVfUi W\Yf]bbYb 'i bX'J YfVfUi W\Yf 'gc``hYb ']a a Yf
a Y\fYfY Ei Y``Yb 'ØVYfdf@ZYbž'VYj cf'g]Y 'dYfgÒb`]W\Y '8 UhYb
Y]b[YVYb 'cXYf'NU\`i b[Yb '`Y]ghYb'' '9g 'V`Y]Vh'ni '\cZZYbž'XUgg 'X]Y
6YhfcZZYbYb 'b]W\h'bi f']\f'; Y'X'ni f@W_Yf\U`hYbž'gcbXYfb 'Ui W\'Ui g
X]YgYf'9fZU\fi b['`YfbYbž'i a ']b 'Ni_i bZh'VYggYf'[Yk UddbYh'ni
gY]b '[Y[Yb 'i bgYf]ÒgY '5b[YVchY'' 8 Yf'J YfVUbX'j cb 'J YfVfUi W\Yfb
k Y]gh'ni XYa 'Ui Z'X]Y'; YZU\fYb '\]bž'X]Y'a]h'k Y]hYfYb '9f\Ò\i b[Yb
XYf'; 9N!; YVØ\fYb'j YfVi bXYb'g]bXž'i bX'fi Zh'XUni 'Ui Zž'VY]
: fU[Yb'cXYf'K]XYfgdf@W\Yb'U_h]j 'ni 'k YfXYb''

B 5;

8 YhU]`g

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'X]Y!bUWX f]WX hYb "b Yh