

6Yf]WXh' 'GWXk Y``Yb`ÀbXYf

8]Y'Bi hni b['i bX'XYf'<UbXY`j cb'?fmdhck À\fi b[Yb
Yf`YVYb']b'=bX]Yb'Y]bYb'6cca ži bX'XYf'[fÒ»hY'HY]`X]YgYg
K UWXghi a g'_ca a h'Ui g'_`Y]bYb'GhÀXhYb"'@Ui h'6Yf]WXhYb
`c_U`Yf'6ÒfgYb'k Uf'XUg'K UWXghi a 'YI dcbYbh]Y``"
=bhYfYggUbh'k Uf'Ui WX'XUg'DfcZ]`X]YgYf'bYi Yb'HY]`bY\a Yfž
XU'g]Y'gY\f'[i h'Ui g[YV]`XYh'g]bXž'g]WX'b]WXh'bi f'Ui Z
6]hWc]b'_cbnYbhf]YfYb'i bX'cZZYb'g]bXž']\fY'DcfhZc`]cg'a]h
YI ch]gWXYfYb'5b[YVchYb'ni 'X]j Yfg]Z]n]YfYb"

? fmd hc k ÀW gh]b =b X]Y bg ? `Y]bghÀ X hY b

@Ui h'XYf'7cj]X!%-!DUbXYa]Y'k YfXYb'X]Y'Bi hni b['i bX'XYf < UbXY''j cb'?fmdhck À\fi b[Yb'j cb']bX]gW\Yb'6Øf[Yfb'U'g A $O[`]WX_Y]h'[Ybi hnhž'i a 'ni ']bj Ygh]YfYb'i bX'ni gÀhn']W\Yg'; Y'X'ni j YfX]YbYb'6Yf]W\hY'Ui g'fY[]cbU'Yb'A YX]Yb'''+\bhYfYggUbhYf']gh YxcW\ž'XUgg'X]YgYg'K UW\ghi a ']b'__'Y]bYb'Gh\XhYb'bcW\'[f\O\)Yf]gh\z'k c'XUg'+\bhYfYggY'Ub'?fmdhck \A\fi b['6Yf]W\hYb'ni \Zc'[Y'gY]bYb < <math>O$ Ydi b_hYffY]W\h'

9]bY``c_U`Y`6ÒfgYžK Un]fl ž'a Y`XYhY`YfghUi b`]WXY
BYi_i bXYbnU\`Yb`Ui g`X]YgYb`_`Y]bYb`GhÀXhYbž'X]Y`U`g`H]Yf!&!`i bX
H]Yf!'!GhÀXhY`_`Ugg]Z]n]Yfh`k YfXYb"'8]Y`j cb`XYf`6ÒfgY`[Ya Y`XYhYb
6Ybi hnYfUba Y`Xi b[Yb`Ui g`X]YgYb`GhÀXhYb`g]bX`i a `&ž*(, I
[Ygh]Y[Yb"'8Yf`79C`j cb`K Un]fl ž'B]gWXU``G\Yhhmž'gU[hY`XYf`\DX]U
H]a Yg.

H]Yf!&!'i bX'H]Yf!' !GhÀXhY'\UVYb']a '\\\J\f'&\&\ZUgh')) |
XYf'[YgUa hYb'6Ybi hnYfUba Y`Xi b[Yb'VY]'K Un]fl
[YbYf]Yfh'i bX'XUa]h'H]Yf!\%!GhÀXhY'\ØVYf\c`hž'X]Y'Y]b
5ba Y`XYk UW\\ghi a 'j cb'\&'' +) 'i 'j YfnY]\W\\bYhYb''

8]Y'GhUbXcfhY'bYiYf'BihnYf'ÀbXYfb'g]WX'YVYbgc'k]Y'X]Y'DfcZ]`YbYiYf'?fmdhc!=bjYghcfYb"

ŸbXYfib[XYg5b`Y[YfdfcZ]`g]b =bX]Yb

8]YgYf'bYi Y'Ni ghfca 'j cb'A YbgWXYb']b'X]Y'?fmdhc!I a [YVi b[']b \(\pm \times \) YfÀbXYfh'XUg'DfcZ]`'XYg'Xi fWXgWXb]hh`]WXYb ?fmdhck À\fi b[g]bj Yghcfg"'8]Y'a Y]ghYb'BYi ni [Àb[Y'g]bX''Øb[YfU`g'') '\(\pm \times \) YjbYb'Y]bYb'5VgWX`i gg"'6Yf]WXhY'j cb'`c_U`Yb 6ÒfgYb'VYghÀh][Ybž'XUgg'a Y\f'U`g'-\\$'i 'XYf'bYi Yb'\(\pm \) YghcfYb'\(\pm \) I dYfhYbž'A 65!5Vgc`j YbhYbž'\(\pm \) [Yb]Yi fY'i bX'GhUfhi d!6Yg]hnYf q]bX"

8]Yg'\Uh'ni f'8]j Yfg]Z]n]Yfi b['XYf'5b`U[Ya i ghYf'VY][YhfU[Ybž'X]Y\Yi hY'Ui Z'XYb']bX]gW\Yb'?fmdhca Àf_hYb'ni 'gY\Yb'g]bX"'8]YgY\bYi Yb'<\AbX`Yf'bY][Yb'Y\Yf'XUni ž'j cb'\dj Ygh]h]cbYb'k]Y\9h\YfYi a 'i bX'6]hWc]b'ni 'bYi Yb'HYW\bc`c[]Yb'k]Y'XYnYbhfU`Yf:]bUbn]Yfi b['fXYZ]Ł'i bX'B: Hg'ØVYfni [Y\Yb"'B: Hg'k YfXYb'j cb Y]b][Yb'6ÒfgYbž'X]Y'VYfY]hg'ØVYf'Y]b\Y]a]gW\Y'A Af_hY'j YfZØ[Ybž\Ufh'[YXfAb[hž'i a 'j ca '? Ui Z'i bX'J Yf_Ui Z'X]YgYf'\dghfi a YbhY'ni dfcZ|h]YfYb"

8Yf'79C j cb'K Un]fl'[UV'Ubž'XUgg'g]Y'ØVYf']\fYb'<Y]a Uha Uf_h ØVYf'%\$, "\$\$\$'l G!8c``Uf'Ub'B: Hg'j Yf_Ui Zh'\UVYb"'8Ug'a U['b]W\h j]Y`'YfgW\Y]bYbž'UVYf'Yg']gh'Y]b'A Uf_hž'XYf']a a Yf'bcW\'k ÀW\gh" 8Yf'5i ghUi gW\'Vcca h'a]h'5_h]j]hÀhž'hfchn'U`''XYfffY[i `Uhcf]gW\
DfcV`Ya Yž'a]h'XYbYb'XUg'@UbX']b'6Yni ['Ui Z'?fmdhck À\fi b[Yb i bX'X]Y'@Y[U`]hÀh'X][]hU`Yf'J Yfa Ò[Ybgk YfhY']a '@UbX'_cbZfcbh]Yfh k Uf"'8]YgYg'K UW\ghi a 'XYf'BUW\ZfU[Y'bUW\'?fmdhc'\Uh'X]Y 6ÒfgYb'XUni 'VYk Y[hž'bYi Y'DfcXi _hY'Ubni V]YhYbž'Y]bgW\`]Y»`]W\
DYYf!hc!DYYf'fD&DŁ!A Àf_hYbž'i a 'X]Y'5i Zg]W\h'Xi fW\'X]Y

K UgʻXYb_YbʻG]YʻØVYfʻXUgʻK UWXghi a ʻXYfʻ?fmdhck À\fi b[Ui ZʻXYbʻ]bX]gWXYbʻA Àf_hYb3ʻGU[YbʻG]YʻYgʻi bgʻ]a ?ca a YbhUfVYfY]WX`i bhYb"

6] `XbUW k Y]gY. `G\ i hhYfghc \underline{W} _Z`D]i UVUm \underline{z} `K]_] '7ca a cbg

fZ bWh]cbfXžgž]XŁoj Uf~gžZg1 X"[Yh9`Ya Ybhg6mHU[BUa YfgŁQ\$Q']ZfK"[Yh9`Ya Ybh6m=Xf]XŁŁfYhi fb/g1 X"WfYUhY9`Ya YbhfgŁ/g"]X1]X/g"gfW1 ~\hhdg.#WcbbYWhZUWYVcc_"bYh#YbSl G#gX_"g, I ZVa `1 % j Yfg]cb1j' "&~/Zg"dUfYbhBcXY"]bgYfh6YZcfYflgžZgŁ/qfXcWia YbhžfgWf]dhfžfZUWYVcc_!ggX_fŁŁ/

8 Y hU]`(

6Ygi WXYb G]Y i bg Ui Z. _fmdhc!bYk g"Uh