

HYffcf!5`Ufa ']b'?Uf`gfi \Y.'Dc`]nY] j Yf\UZhYh'=G!Gma dUh\]gUbhYb°

? Uf`gfi \Y.`Nk Y]'@]VUbYgYbž'Y]b'HØf_Y'k Y[Yb'=€! HYffcfj YfXUW\h'ZYgh[Ybca a Yb"'9fa]hh`i b[Yb'`Ui ZYbž'_Y]bY ; YZU\f'ZØf'6Yj Ò`_Yfi b["

? Uf`gfi \Yž'8 Yi hgWX`Ub X`!`?i fn`bUWXXYa `X]Y`BUWX f]WX h'ØVYf X]Y`: YghbU\a Y`Ub[YV`]WXYf` \oplus !HYffcf]ghYb`Ub`X]Y`² ZZYbh`]WX_Y]h [Y`Ub[ž'X]g_i h]Yfh`8 Yi hgWX`Ub X`ØVYf`HYffcf[YZU\f'i b X G]WXYf\Y]hga U» bU\a Yb"' \oplus Y]bYf`_ccfX]b]YfhYb`5_h]cb`\UVYb 9]bgUhn_fàZhY`Ui g`6UXYb!K ØfhhYa VYf[`i bX`<YggYb`XfY]'^1 b[Y A ÀbbYfž'XUfi bhYf`nk Y]``]VUbYg]gWXY`6fØXYf`]a `5`hYf`j cb`%)`i bX &\$`\delta\fYb`i bX`Y]bYb`&\$!^\A\f][Yb`HØf_Ybž']b`I bhYfgi WXi b[g\UZh [Ybca a Yb"'8]YgY`JYf\UZhi b[Yb`YfY][bYhYb`g]WX`Ua `GcbbhU[ž k]Y`X]Y`GhUUhgUbk U`hgWXUZh`?Uf`gfi \Y`Ua `XUfUi ZZc`[YbXYb 8]YbghU[`a]hhY]`hY'"

K]Y '> i b [Y': fY]\Y]h'VYf]W\hYhž\UhhYb'X]Y'JYfXÀW\h][Yb'VYfY]hg
_cb_fYhY'JcfVYfY]hi b[Yb'ZØf'Y]bYb'HYffcfUbgW\`U['[YhfcZZYbž
i bhYfghØhnh'j cb']\fYf'h]YZ'j Yfk i fnY`hYb'Gma dUh\]Y'ZØf'XYb

=g`Ua]gW\Yb'GhUUh''6YY]bXfi W_YbX']gh'X]Y'[YZi bXYbY'6Yk Y]g`Ugh.
Y]b'Ghi fa[Yk Y\f'a]h'A i b]h]cbž'HU_h]_k YghYbž'A YggYfž
Ghi fa\Ui VYb'i bX'Y`Y_hfcb]gW\Y'; YfÀhY'k]Y'<UbXmg'i bX
8 UhYbhfÀ[Yfž'X]Y'ni fnY]h'i bhYfgi W\h'k YfXYb'''8 cW\'YfhY]`hYb'X]Y
6Y\ÒfXYb'9bhk Ufbi b[.'9]bY'U_i hY'; YZU\f'VYghUbX'ni '_Y]bYa
NY]hdi b_hž'j Yfg]W\Yfh'X]Y'GhUUhgUbk U`hgW\UZh''

JYfghÀf_hY'G]WXYf\Y]hga U»bU\a Yb [YZcfXYfh

I bhYfghØhnhik YfXYb X]Y 9fa]hhi b[Yb j cb XYb ⊕bYba]b]ghYfb Ui g

VY]XYb`VYhfcZZYbYb`6i bXYg`ÀbXYfb"'H\ca UgʻGhfcV``Ui gʻ6UXYb!

K ØfhhYa VYf['VYhcbh'X]Y`K UW\gUa _Y]h'XYf`G]W\Yf\Y]hg_fÀZhY.

I bgYfY`Ghfi _hi fYb`Zi b_h]cb]YfYb```Ui W\`ØVYf`@ÀbXYf[fYbnYb\]bk Y[" 'GY]b`\Ygg]gW\Yf`?c``Y[Y`Fca Ub`DcgYW_'i bhYfghfY]W\h
ni XYa ž'XUggʻX]YgYf`: U```X]Y`5bgdUbbi b['XYf`U_hi Y``Yb
G]W\Yf\Y]hg`U[Y`j YfXYi h`]W\hi bX`Yf`ZcfXYfh'a Y\f`6YZi [b]ggY`ZØf
X]Y`G]W\Yf\Y]hgVY\ÒfXYb"'9]b`dUggYbXYg`G]W\Yf\Y]hgdU_Yh
VYZ|bXY`q]W\`VYfY]hg`la '; YgYhn[YVi b[qdfcnYqg"

5 i Z'XYb'A][fUh]cbg\]bhYf[fi bX'XYf'J YfXÀW\h][Yb'i bX'XYfYb Gma dUh\]Y'ZØf'XYb'=g`Ua]gW\Yb'GhUUh'[]b[Yb'VY]XY'A]b]ghYf']b]\fYb'GhUhYa Ybhg'b]W\h'Y]b'''J]Y'``Y]W\h']gh'X]Yg'Y]b'NY]W\Yb'ZØf'X]Y dc`]h]gW\'\Y]_`Y'8]g_i gg]cb'i a '=bhY[fUh]cb'i bX'fY`][]ÒgYb 9I hfYa]ga i gž'X]Y'8Yi hgW\`UbX'gW\cb'`Àb[Yf'VYgW\ÀZh][h"

9]b 5 `Ufa g][bU` ZØf X]Y ; YgY ``gW UZh3

8 c W X]Y J Yf\ UZhi b[X]YgYfa i ha U» `]W Yb 'HYffcf]ghYb '\À`h'X]Y 2 ZZYbh`]W _Y]h'k Y]hYf\]b ']b '5 hYa "'8 Ug 'VYXfc\`]W Y '6]`X 'nk Y]Yf 6 fØXYfž'j YfghÀf_h'Xi fW 'X]Y J cfghY ``i b['Y]bYg'¾ [YbX`]W Ybž'XYf cZZYbVUf']b 'XYb': Àb[Yb 'fUX]_U`Yf'¾Yc`c[]Yb'[YZUb[Yb']ghž'k Ø\`h X]Y'; YgY``gW UZh'Ui Z"'K]Y 'Yg'gW Y]bhž'k Uf'X]Y '6YXfc\i b[[fY]ZVUfYf'U`g'a UbW 'Y]bYf'XUW hYž'k]Y 'Nci Hi VY']b'J]XYcg UbXYi hYhž'X]Y 'XghbU\a Y'Xc_i a Ybh]YfYb"

8]Y'8]g_i gg]cb'i a 'X]Y'6U`UbWY'j cb'G]WXYf\Y]h'i bX': fY]\Y]hž'i a \$\delta\hY[fUh]cb'i bX'FUX]_U`]g]Yfi b['k]fX'g]WXYf`]WX'k Y]hYf[Y\Yb" 8YbbcWX'V`Y]Vh'XUg'@cV'Ub'X]Y'gWXbY``Yb'i bX'YZZY_h]j Yb A U» bU\a Yb'XYf'G]WXYf\Y]hg_f\(\text{Z}\hY\text{Z}'X]Y'GWX\`]a a YfYg'\UVYb j Yf\]bXYfb'_\(\text{ObbYb\text{Z}'Y}\)b'k]WXh][Yg'G][bU``Ub'U``Y'6YhY]`][hYb.'8Yf ?Ua dZ'[Y[Yb'XYb'HYffcf'Ui Z'XYi hgWXYa '6cXYb'\Uh ?cbgYei YbnYb"

8 Y hU]`g	
Cfh	?Uf`gfi\Yž'8Yi hgW\`UbX