

: cgg]``XYg`\\fYg`&\$&(.`HUa V]U`gd]fU`]g ZUgn]b]Yfh`Ua `6fca UW_Yf

9bhXYW_Yb^G]Y^X]Y^ZUgn]b]YfYbXY^Zcgg]`]YfhY^@YVYbggdif / eich/HUa V]U^gd]fU`]g/ eich/`]a ?fY]g^; ch\U^ Y]b^<][\`][\h

?fY]g'; ch\U"'8]Y'FY[]cb'ia '; ch\U'VY`YVh'g]W\b]W\h'bif'XifW\X]Y'FØW__Y\f'Ui g'XYf'I f`Ui VgnY]hž'gcbXYfb'Ui W\'Xi fW\'Y]bYZUgn]b]YfYbXY'9bhXYW_i b[ž'X]Y'XUg'@]W\h'XYf'^2 ZZYbh`]W_Y]hYfV`]W_h'\Uh"'8]Y'Zcgg]`Y'5i g[fUVi b[gghÀhhY'Ua '6fca UW_Yf'n]Y\h]a a Yf'a Y\f'6Ygi W\Yf'Ubž'X]Y'g]W\'ZØf'X]Y'; Y\Y]a b]ggY'XYf9fX[YgW\]W\hY']bhYfYgg]YfYb"

8]Y ZUgn]b]YfYbXY Gdi f XYf HUa V]U gd]fU`]g

± XYf'5i g[fUVi b[gghÀhhY'Ua '6fca UW_Yfž'bÒfX`]WX'j cb'HUa VUWX!
8]Yh\Ufnž'k i fXY'Y]bY'Gdi f'YbhXYW_hž'X]Y'Ui Z'Y]b'@YVYk YgYb
\]bk Y]ghž'XUg'j cf'&-\$'A]``]cbYb'≠J\fYb'`YVhY.'HUa V]U'gd]fU`]g"
8]YgY'_`Y]bYž'_bUdd'nk Y]'V]g'XfY]'NYbh]a YhYf'[fc»Y'Gdi f
dfÀgYbh]Yfh'g]WX'Ui »Yb'fi bX'i bX']bbYb'gd]fU`ZÒfa]["'Hfchn']\fYf
VYgWXY]XYbYb'; fÒ»Y'k]f_h'g]Y'XUb_']\fYf'WXUfU_hYf]gh]gWXYb
: cfa 'i bX'FÀhgY`\UZh][_Y]h'Ài »Yfgh'Y`Y[Ubh"

- 8]Y'Gdif'[]`h'U`g': cgg]``XYg'\\fYg'\&\\(ž'[Yk\A\`h'jcb'XYfDU`\Acbhc`c[]g\W\Yb';\YgY``g\W\UZh"
- G]Y]gh'Y]b ZUgn]b]YfYbXYg NYi [b]g XYf DYfa!NY]h"
- $C \ Vk \ c \ ``X]Y \ Gdi \ f'gY]h'ZUgh'+ $'>U \ fYb \ VY_Ubbh']ghz' V `Y]Vh$]\ $fY \ 9bhghY \ i \ b[\ 'i \ b_`Uf"$

 $9]b^{\circ}]W_{\cdot} \]bhYf^{\cdot}X]Y^{\circ}i^{\cdot}]ggYb^{\cdot}XYf^{\cdot}I^{\cdot}Ui^{\cdot}VgnY]h^{\cdot}$

DZUffYf]b:5bYhhY:8YbbYf:gdf]Wkh:ØVYf:X]Y:FØW__Y\f:ni f [Ykc\bhYb:Ghfi_hi f:bUWk:XYf::Yf]YbnY]h":J]Y:Y:A YbgWk:Yb:gdØfYb XYb:K UbXY:jcb:XYf::fY]\Y]h:XYf:Gca a YfZYf]Yb:ni fØW_:]b:XYb [YfY[Y:hYb:5:`hU["" \Rightarrow hnh:[Y\h:Yg:k]YXYf:[YcfXbYh:ni ž:gU[h:g]Y i bX:j Yfk Y]gh:Ui Z:X]Y:k]Wkh][Y:Ghfi_hi f]Yfi b[ž:X]Y:ZØf:?]bXYf:i bX 9fk UWkgYbY:jcb:JcfhY]:`]gh":8]Y:A $\hat{O}[:]$ Wk_Y]hž:HU[Ygd:AbY:ni \UVYbž:Z \hat{O} fXYfh:Y]b:; YZØ\:`jcb:9fZØ:`i b["

8 Y b b Y f'\ Y V h'\ Y fj c fž' X Uggʻgc k c\`: Y f] Y b 'U`gʻUi W\ 'X] Y 'F Ø W__Y\ f ni f`F ci h] b Y ']\ fY '< Y f Ui g Z c f X Y fi b [Y b 'a]h 'g] W\ 'V f] b [Y b " 8] Y :: f U[Y ž k] Y 'a Ub 'g Y] b Y 'N Y] h 'g] b b j c``` [Y g h U`h Y h ž'] g h 'Z Ø f 'j] Y `Y 'Y] b 'n Y b h f U`Y g H\ Y a U"' 8 Ua] h 'X Y f '5 ``h U['Y f Z Ø ``h 'V `Y] V h ž'] g h 'Y] b Y '_` Uf Y 'G h fi _h i f k] W\ h] [ž'g c 'X] Y 'D Z Uf f Y f] b ž' X] Y 'X Y b '@ Y g Y f] b b Y b 'i b X '@ Y g Y f b 'n i fi Z h ž X] Y 'b À W g h Y 'K c W\ Y 'a] h '; Y`Ugg Y b \ Y] h 'i b X 'D`Ub i b [g Z f Y i X Y Ub n i [Y \ Y b"

9]b Cfh XYf =bgd]fUh]cb

6Ygi WXYf'_ObbYb'X]Y'9]bXfØW_Y'XYg'6fca UW_Yf']a ' 6fca UW_Yf@UV ']b'GWX`cgg': f]YXYbghY]b'Yf`YVYb'i bX'XUVY]'X]Y'Y][YbYb; YXUb_Yb'ØVYf'X]Y'9fX[YgWX]WXhY'i bX'X]Y'Ghfi _hi fYb'XYg'@YVYbg j Yfh]YZYb"'K Yf'X]Y'5i g[fUVi b[Yb'\Ui hbU\'Yf`YVYb'a OWXhYž\Uh V]g'ni a '- "'5i [i gh'X]Y'; Y`Y[Yb\Y]h'XUni ž'i bX'_Ubb'XUVY]'XYb WXUfU_hYf]gh]gWXYb'?`Ub['XYf'5fVY]h'XYf'DU`Acbhc`c[Yb']a 'C\f\OfYb"

 $8]Y `9bhXYW_i b[`ibX`X]Y `Ub\U`hYbXYb`5ig[fUVib[Yb`V]YhYb`b]Whbifk]ggYbgWkUZh`]WkY`9f_Ybbhb]ggYz`gcbXYfb`g]bX`UiWk`Y]bHfYZZdib_h`ZØf`BUhif]bhYfYgg]YfhY`ibX`: Ua]`]Yb"`8Yf`[fc»Y6YgiWkYfUbXfUb['jYfXYih`]Wkhz`XUgg`XUg`<math>\pm$ bhYfYggY`Ub`XYf9fX[YgWk]WkhY`]b`XYf`6YjÖ`_Yfib['ghUf_`]gh"

Ni gUa a YbZUggi b['i bX '5i gV`]W_

8]Y 'Zcgg]`Y 'Gdi f'HUa V]U 'gd]fU`]g']gh'a Y\f'U`g'bi f'Y]b 'FY`]_h'Ui g

XYf'J Yf[Ub[Yb\Y]h'g]Y'j YfV]bXYh'; YgWX]WX hY 'a]h'XYf'; Y[Ybk Ufh
i bX'ghÀf_h'XUg' +b hYfYggY'Ub 'DU`Àcbhc`c[]Y']b 'XYf'FY[]cb"
; `Y]WX nY]h]['a U\bh'X]Y 'FØW__Y\f'ni f'[YfY[Y`hYb'NY]h'Ubž'k]Y

k]W\h]['Ghfi _hi f'i bX'D`Ubi b['g]bX"'Gck c\`'VY]'XYf'9f_i bXi b[j cb'j Yf[Ub[YbYb'NY]hYb'U'g'Ui W\']a 'Y][YbYb'@YVYbgf\mh\a i g ghY\h'X]Y': fU[Y']a 'F Ui a .'K]Y'[YghU`hYb'k]f'i bgYfY'NY]h'g]bbj c`` i bX'YfZØ``YbX3

8]Y'9f_i bXi b['XYf'JYf[Ub[Yb\Y]h'i bX'X]Y'FØW__Y\f'ni f'Fci h]bYgWXY]bYb'g]WX']b'; ch\U'[Y[YbgY]h]['ni ']bgd]f]YfYb'i bX'V]YhYbY]bY'gdUbbYbXY'DYfgdY_h]j Y'Ui Z'X]Y'6U`UbWY'j cb': fY]nY]h'i bXGhfi _hi f']b'i bgYfYa '@YVYb"

8 YhU]`g

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