

< YfVgh_i fgY`Ub`XYf`J < G`GhY[`]hn.`>Yhnh Uba Y`XYb`i bX`BYi Yg``YfbYb°



GhY[`]hn!NY\`YbXcfZž'8Yi hgWX`UbX'!'8]Y'J]Whcf!; c``UbWh!
Jc`_g\cWXgWXi `Y'fJ < GŁ']b'GhY[`]hn!NY\`YbXcfZ'd`Ubh'ZØf'XYb
<YfVgh'Y]b'i a ZUb[fY]WXYg'?i fgUb[YVch'a]h'ØVYf'%%\$\$
j YfgWX]YXYbYb'?i fgYb"'8]YgY'XYW_Yb'Y]bY'J]Y`nU\`'j cb'H\Ya Yb
UVž'i a 'XYb'i bhYfgWX]YX`]WXYb'6YXØfZb]ggYb'XYf'6Øf[Yf'[YfYWXh
ni 'k YfXYb"'8Uni '[Y\ÒfYb'gck c\`'VYk À\fhY'U`g'Ui WX'bYi Y
5b[YVchY"

 $6Yf`]b"XY`VYf]WkhYhž`XUgg`X]Y`J < G`]b`XYb`6YfY]WkYb`Dc`]h]_ž ; YgY``gWkUZh`i bX`l a k Y`h`VY]gd]Y`gk Y]gY`Y]bY` FUXk UbXYfi b[. G]YX`i b[Yb`XYf'%- &$Yf`*J\fY`]a `6Yn]f_`GhY[`]hn `i bX`Y]bYb _cghYb`cgYb`Cb`]bY!?i fg` Dc`]h]gWkYf'; YgdfÀWkg_fY]g` 8]g_i gg]cbYb`ni `hU[YgU_hi Y``Yb`H\Ya Yb `UbV]YhYh"$

=a `Dfc[fUa a VYfY]W\ ?i`hi fii bX'; YghU`hYb'ghY\Yb
9]bghY][Yf_i fgY'k]Y` 9fnÀ\`hYW\b]_ ž` ?Øbgh`Yf]gW\Yg'NY]W\bYb'=
i bX': `Ua YbWc'= ini f'5i gk U\`": Øf'; Ygi bX\Y]hgVYk i gghY'V]YhYh
X]Y'J < G'?i fgY'k]Y` ? Ògh`]W\Y'6fchUi Zghf]W\Y'j Y[Ubž'j Y[YhUf]gW\
i bX'k]`X 'gck]Y` 5mi fj YX]gW\Y'6`]hn[Yf]W\hY 'Ub"'5i W\']a
6YfY]W\'XYf'GdfUW\Yb'\Uh'X]Y'J < G'Y]b'[fc» Yg'5b[YVchž'XUg
]bgVYgcbXYfY'X]Y'8Yi hgW_i fgY'ZØf'[YZØW\hYhY'A YbgW\Yb'gck]Y

=bhY[fUh]cbg!'i bX'6Yfi Zg_i fgY'i a ZUggh"'HY]`bY\a YbXY'_ÒbbYb
8Yi hgW\'Ui Z'j YfgW\]YXYbYb'B]j YUi g'f5%' '7 &Ł'`YfbYb'i bX'gc[Uf
Ub'Y]bYf' K Y`hfY]gYb!Hci f'a]h'XYf'J < GGN.' ≢hU`]Yb' 'D]nnUž'DUghUž
Dc`]h]_ 'hY]`bY\a Yb"

6Yf`]b"XY'\YVh'\Yfj cfž'XUgg'5ba Y`Xi b[Yb'YXYfnY]h'a Ò[`]W\'g]bX i bX'X]Y'?i fgY'cb`]bYž'dcghU`]gW\'cXYf'dYfgÒb`]W\']b'XYb GYfj]W\VØfcg'[YVi W\h'k YfXYb'_ObbYb"

=bhY[fUh]cbg_i fgY 'U`g'GWX `ØggY``ni f'HY]`\UVY

⇒hY[fUh]cb g]bX"

8]Y *\dothY [fUh]cbg_i fgY *VYghY \ Yb *Ui g*nk Y] *A cXY *`Yb. *XYa U``[Ya Y]bYb *\dothY [fUh]cbg_i fg*i bX *XYa *\dothY [fUh]cbg_i fg*a]h 5 `d \ UVYh]g]Yfi b["*@YhnhYfYf*f]W\ hYh*g]W\ *Ub *A YbgW\ Ybž*X]Y *b]W\ h Ui gfY]W\ YbX *`YgYb *i bX *gW\ fY]VYb *_ObbYb"*6Y]XY *?i fgUfhYb *YbXYb a]h *XYf*8 HN! DfØZ b[*f8 Yi hgW\ !HYgh *ZØf*Ni k UbXYfYf\ Lž*X]Y *XUg GdfUW\ b]j YUi *6%*VYgW\ Y]b][h"*8 Yf*Cf]Ybh]Yfi b[g_i fg*gW\ `]Y * h*a]h XYf*65A:!DfØZ b[*@YVYb*]b*8 Yi hgW\ `UbX *UV"*8]Y *5``[Ya Y]bYb \dothy [fUh]cbg_i fgY*i a ZUggYb*gYW\ g*GdfUW\ a cXi `Y*gck]Y *Y]bYb

 $Cf]Ybh]Yfib[g_ifg_jcb_%$$IbhYff]WkhgghibXYb" \\ K]Y'X]Y'Jc_g\cWkgWki_Y'Ghc_VYf[_'Yf_AihYfhz_g]bX'X]YgY'?ifgY \\ Y]bY'fYWkh]WkY'BchkYbX][_Y]h'ZØf_j]Y'Y'A][fUbhYbz_ibX'Yg_[]Vh \\ A O[_']Wk_Y]hYb_nif_Z]bUbn]Y_Yb_IbhYfghØhnib[z_gcXUgg_;YVØ\fYbhY]kY]gY'ØVYfbcaaYb_kYfXYb_ObbYb"$

: \emptyset f k Y]hYfY \Rightarrow Zcfa Uh]cbYb ini f 5ba Y `Xi b[ii bX ini a '?i fgUb[YVch _\ObbYb \pi hYfYgg]YfhY \times Y]Y K YVg]hY \times XYf J < G \times VYgi WXYb ii bhYf k k k "j \ggn"XY \c XYf \g]W\times X]fY_h\times Y]a \times GYfj]W\times \Øfc \tau Y \times Y\times ii bhYf XYf \times HY \times Zcbbi a a Yf \s' \\$!-\\$&--!*%) * \c XYf \dYf \gYf \times I \U] \times Ub \gyfj]W\times 4 j \ggn"XY" K Yf \tau Y\f \@VYf \times \Ug \pi \hY[fUh]cbgUb[YVch Yf \ZU\f Yb \tau \Ow\hY \times YffY]W\h'J \UX]a]f \@Yk Yb \times \hYf \s' \\$!-\\$&--!) +' (c XYf \dYf \gY \f \gY \f \gyn"XY"

| 8 YhU]`g | |
|----------|---|
| Cfh | GhY[`]hn!NY\`YbXcfZž'8YihgWX`UbX |
| EiY``Yb | • k k k "VYf`]b"XY |
| | • X]Y!j \g"XY |
| | k k k "j \gghc`VYf["XY |

6Ygi WXYb G]Y i bg Ui Z. a Y]b!VYf`]b bYh