

$DgmWX ch\ YfUd]Y!5i gV]`Xi b[. 68D ZcfXYfh Xf]b[YbX ZU]fY:]bUbn]Yfi b[$

8]Y DfYggYa]hhY]`i b['XYg'68D'k Ufbh'j cf'Y]bYa '9b[dUgg']b XYf'dgmW\ch\YfUdYi h]gW\Yb'J Yfgcf[i b[']b'8Yi hgW\`UbX" Hfchn'XYf'5i gV]`Xi b[gfYZcfa 'V`Y]Vh'X]Y':]bUbn]Yfi b['XYf K Y]hYfV]`Xi b['i bfY[Y`hž'k Ug''\ b[Y`DgmW\ch\YfUdYi hYb'j cf < YfUi gZcfXYfi b[Yb'ghY``h" 9fZU\fYb'G]Y'a Y\f'ØVYf'X]Y : cfXYfi b[Yb'XYg'68D'Ub'XYb'; YgYhn[YVYf'i bX'X]Y 5i gk]f_i b[Yb'Ui Z'X]Y'dgmW\]gW\Y'; Ygi bX\Y]hgj Yfgcf[i b["



9]b 5`Ufa fi Z'Ui g'6Yf`]b 8]Y ?f]gY]a XYi hgWXYb; Ygi bX\Y]hgk YgYb \Uh'Y]bYb bYi Yb < O\Ydi b_h'YffY]WXh.

DgmWXc`c[]gWXY DgmWXch\YfUdYi hi]bbYb ghY\Yb j cf XYa B]WXhg°

\(\pm \text{XYf} < Ui dhghUXh'VfUi hig]WX Y]b [Yk U`h][Yf'Ghi fa ini gUa a Yb hfchn'Y]bYf'`Ab[gh'ØVYfZA``][Yb 5i gV]`Xi b[gfYZcfa z'X]Y 5V\]`ZY

gWX UZZYb gc``hYz'g]bX X]Y K Y]WXYb ni f':]bUbn]Yfi b[
dgmWXch\YfUdYi h]gWXYf'K Y]hYfV]`Xi b[Yb bcWX]a a Yf'b]WXh

[YghY``h"

8]Y'FYU`]hÀh'XYf'5i gV]`Xi b['i bX :]bUbn]Yfi b[

 $9g']gh'Y]b'XfY]ghYg'GnYbUf]c.'DgmWkc`c[]Yghi X]YfYbXY'a \varnothing ggYb'Z\varnothing f] YfY'Y]`_i bX`]WkY'5i gV]`Xi b['h]YZ']b'X]Y'HUgWkY'[fY]ZYb'cXYf'[Uf 8Uf`Y\Yb'Ui ZbY\a Yb'`K]Y'i bhfU[VUf']gh'XUg3'K \A\fYbX']\fYf 5i gV]`Xi b[gnY]h'j YfX]YbYb'g]Y'cZh'b]Wkhg'cXYf'bi f'Y]b 6fch_f\@a WkYb']b'DgmWk]Uhf]Yb'i bX'dgmWkcgca Uh]gWkYb 9]bf]Wkhi b[Yb'''8]Y'`Ub[Y'YfgY\bhY'5i gV]`Xi b[gfYZcfa 'gc``hY X]YgY'A]gggh\AbXY'VYgY]h][Yb\Z'XcWk'X]Y'FY[Y'i b['ni f':]bUbn]Yfi b['Z\A``h'Y]bZUWk'i bhYf'XYb'H]gWk''$

8 Yf'DYh]h]cbgUi ggWi gg'XYg'8 Yi hgWXYb'6i bXYghU[g'\Uh'nk Uf'XYb :]b[Yf']b'X]Y'K i bXY'[Y'Y[h'i bX'g]WX'ZØf'XUg'fYWh\`]WXY'5b`]Y[Yb Ui g[YgdfcWXYb''i bX'k Ug'Vf]b[h'XUg3'9]b'`Ui hYg'GWXk Y][Yb Ui g'XYa'6i bXYga]b]ghYf]i a 'ZØf'; Ygi bX\Y]h''HfchnXYa j Yfgi WXYb'X]Y'K Y]hYfV]`Xi b[gghÀhhYbž'a]h'XYb'ZØ\fYbXYb ?fUb_Yb_UggYb'@Ògi b[Yb'ni 'j Yf\UbXY`b"'8cWX'X]YgY JYf\UbX`i b[Yb'YbXYb'Yfk Ufhi b[g[Ya À»']a '7\Ucgž'XU'Yg'_Y]bY [YgYhn`]WXY'; fi bX`U[Y'[]Vh'

GWX]YXg[Yf]WXhY]a 9]bgUhn°

Hfchn'XYf'UbghfYb[YbXYb'6Ya Ø\i b[Yb'g]bX'X]Y'YfghYbGWX]YXgj YfZU\fYbž']b'XYbYb'?fUb_Yb_UggYbž@Y]ghi b[gYfVf]b[YbXY'i bX'?`]b]_Yb'Ui ZY]bUbXYfhfYZZYbž'_`À[`]WX[YgWXY]hYfh''? ÒbbhY'Yg'gWX`]a a Yf'k YfXYb3'8]Y'[YgYhn`]WXYJcf[UVY'g]Y\h'j cfž'XUgg'DgmWXch\YfUdYi hl]bbYb']b'K Y]hYfV]`Xi b[Y]bY'Ub[Ya YggYbY'JYf[Øhi b['Yf\U`hYb' 'XcWX'X]Y'YbhgWXY]XYbXY:fU[Y'V`Y]Vh'K c\Yf'_ca a h'XUg'; Y`X3'

8]Y`FYU`]hÀh`BYiYb`ibX`hU`Ybh]YfhYb`DgmW\ch\YfUdYihi]bbYb V`Y]Vh`XYf`Ni[Ub[`nif`:UW\kY]hYfV]`Xib[`jYfgW\`cggYb"`Gc``hY`XYf ;YgYhn[YVYf`b]W\h`gcZcfh`U_h]j`kYfXYbž`Xfc\h`Y]b`Xfc\YbXYf AUb[Y``Ub`Zf]gW\Ya`dgmW\ch\YfUdYih]gW\Yb`BUW\kiW\g`]b 8YihgW\`UbX°`8]Y`NY]h`XfÀb[h°`

8 Yf'68 D' XYf'6Yfi Zgj YfVUb X'8 Yi hgWX Yf'DgmWX c`c[]bbYb'i bX DgmWX c`c[Yb' Yf\YVh'gY]bY'Gh]a a Y''Ni gUa a Yb'a]h'XYf : UWX gY_h]cb'J DD'ZcfXYfh'Yf'Y]bY'Xf]b[YbXY'GWX`]Y» i b[XYf ; YgYhnYg`ØW_Y''9g'[]`hž'XYb'8 fUb['ni 'VY_Àa dZYb'i bX'X]Y ZU]fY'9bh`c\bi b[ZØf'X]YgY'YggYbn]Y``Yb': UWX_fÀZhY'ni g]WX Yfb''Bi f'gc'_Ubb'Y]b'Xfc\YbXYf'9b[dUgg']b'XYf'J Yfgcf[i b[j cb'dgmWX]gWX'Yf_fUb_hYb'A YbgWXYb']a '@UbX'UV[Yk YbXYh k YfXYb''

?cbhU_h]bZcfa Uh]cb.

6Yhh]bU; YbÅY

 $FYZYfYbh]bDfYggY!ibX^2ZZYbh]WX_Y]hgUfVY]h$

: cb. Ž (-%+*), , *, &&&

A U]`. dfYggY4 VXd!j YfVUbX"XY

8 Yf '6 Yfi Zgj Yf V Ub X '8 Yi hg W Yf 'D gm W c`c[]bb Yb 'i b X Dgm W c`c[Yb 'Y "J "'fl6 8 D L 'g Y hn h 'g] W 'g Y]h 'Ø V Yf'+) '\$\lambda \text{Yb 'Z\IDF TX]Y} 6 Y `Ub[Y 'X Yf 'D gm W c`c[Yb ']b '8 Yi hg W `Ub X 'Y]b '

8 Y hU]`g

6 Ygi W Yb 'G]Y i bg 'Ui Z. 'a Y]b!VYf`]b "bYh