

## 8U'BUb['AigYia.'?∃JYfk UbX`ib[ a UW\h'?i`hif'nia '9f`YVb]g°

8 Ugʻ8 UʻB Ub[ʻA i gYi a ʻ\_ca V]b]YfhʻHfUX]h]cbʻi bXʻ? \\
HY WX bc`c[]Y ži a ʻHci f]ghYbʻY]bʻ]bhYfU\_h]j Ygʻ9f`YVb]gʻni
V]YhYb"ʻ9fZU\fYbʻG]Yʻa Y\fʻØVYfʻX][]hU`Yʻ\bcj Uh]cbYbʻ]a
Hci f]ga i g"



8 U'B Ub [žJ]Yhb Ua '!'8 Ug'8 U'B Ub ['AigYia'dfÀgYbh]Yfhig]W bUW Y]bYfia ZUggYb XYb 'F Ybcj]Yfib ['U'g'ac XYfb Yg'NYbhfia'Z0f?i'hifib X'; YgW ]W hYž XUg'hfUX]h]cbY``Y'K YfhY'a]h ZcfhgW f]hh`]W Yf'HYW bc`c[]Y'j YfY]bh"'9]b'[fc» Yg'<][\`][\h`XYg AigYiag']gh'X]Y'+bhY[fUh]cb'jcb'\_Øbgh`]W Yf'+bhY``][Ybn'f?+žX]Y XUg'6 Ygi W Yf`YVb]g'[fib X`Y[Yb X'j YfÀb XYfh'\Uhib X'Yg'XUa]h'niY]bYa'VY`]YVhYb'N]Y``Z0f'b Uh]cbU`Y'ib X']bhYfb Uh]cbU`Y'Hcif]ghYba UW hžk ]Y'J]Yhb Ua"jb'VYf]W hYh"

8 Yf'9]bgUhn'Y]bYg'a Y\fgdfUW\][Yb'j]fhi Y``Yb'5gg]ghYbhYbž'XYf ±0 Zcfa Uh]cbYb'ni 'ØVYf'%\$\$'5fhYZU\_hYb'VYfY]hghY``h'i bX'a Y\f'U`g &\$'GdfUW\Yb'i bhYfghØhnhž'nY][h'XYb'hYW\bc`c[]gW\Yb': cfhgW\f]hh XYg'A i gYi a g"'8]YgY': i b\_h]cbYb'g]bX'b]Wkh'bi f'Ui Z'X]Y'K YVgY]hY VYgWkfÀb\_hž'gcbXYfb'Ui Wk']b'X]Y': UbdU[Yž'A YggYb[Yfž'K \Uhg5dd i bX'XUg'Cb']bY!H]W\_Yhj Yf\_Ui ZgmghYa ']bhY[f]Yfh"'9]b'? # ]bhY[f]YfhYf'BUj ][Uh]cbgfcVchYfž'XYf']b'XYf'@U[Y']ghž'ØVYf'%\$ GdfUWkYb'ni 'gdfYWkYbž'Yf[Àbnh'XUg'X][]hU'Y'9f`YVb]gž']bXYa 'Yf : fU[Yb'VYUbhk cfhYh'i bX'HY]`bY\a Yf'Xi fWk'X]Y 5i gghY``i b[gVYfY]WkY'Ub`Y]hYh"

## =bbcj Uh]j Y HYWX bc `c[]Yb ]a 'AigYia

6Ygi WXYf'\_ObbYb'g]WX'Ui Z'dYfgcbU`]g]YfhY' \$\frac{1}{2}\text{Zcfa Uh]cbYb'ni}
9I dcbUhYb'ZfYi Yb"'8YfFcVchYf'k ]fX']b'Ni \_i bZh'gc[ Uf'Ui Z'ØVYf
) \$'GdfUWXYb'Yfk Y]hYfh''Ni XYa 'Yfa O[`]WXh'XUg'Ui hca Uh]gWXY
?ca a YbhUfgmghYa '<Yf]GhYd5=XYb'; AghYbž' \$\frac{1}{2}\text{Zcfa Uh]cbYb'\text{\te\text{\

## 9]bZi ggʻUi ZʻXYbʻHci f]ga i gʻi bX'\_i `hi fY``Y JYfUbghU`hi b[Yb

8]Y`X][]hU`Y`I a [YghU`hi b[`\Uh`b]W\h`bi f`5i gk]f\_i b[Yb`Ui Z`XUg AigYi a `gY`Vghž`gcbXYfb`Ui W\`Ui Z`X]Y`[YgUa hY Hci f]ga i gVfUbW\Y`]b`8U`BUb["'-\D`XYb``YhnhYb`XfY]`\J\fYb`k i fXY Yf\YV`]W\Yf`9]bZi gg`Ui Z`X]Y`; YgW\AZhga cXY``Y`XYf Hci f]ga i gi bhYfbY\a Yb`Ui g[YØVh"'9]b`]bhY``][YbhYg , VYfk UW\i b[ggmghYa `k i fXY`Ybhk]\V\_Y`hž`i a `]``Y[U`Y

 $B[i\ mYb\ H\]'< cU]'5b\check{z}'X]Y'ghY`j\ YfhfYhYbXY'8]fY\_hcf]b'XYg$   $A\ ]b]ghYf]i\ a\ g'Z\emptysetf'?i\ `hi\ f\check{z}'Gdcfhii\ bX'Hci\ f]ga\ i\ g\check{z}'\ YVh'X]Y'J\ cfhY]`Y$   $XYf'?=\ [bg]WX\ h`]WX'GYfj\ ]W'ei\ U`]hÀhii\ bX';\ YgWX\ AZhgYZZ]n]Ybn'\Yfj\ cf''$   $B[i\ mYb'Ei\ Ub[\ \check{z}'XYf'J\ ]nYdfAg]XYbh'XYf'J\ ]YhbUa'< chY`$   $5ggcW]Uh]cb\check{z}'VYgWX\ fY]Vh'X]Y'< YfUi\ gZcfXYfi\ b[\ Yb'i\ bX'7\ UbWYb\check{z}'X]Y$   $X]Y'?=Z\emptysetfX]Y'6fUbWXY'a\ ]h'g]WX'Vf]b[\ h''8]Y'Bi\ hni\ b[\ 'j\ cb\ HYWX bc`c[\ ]Y'k\ ]fX'k\ Y]h\]b'U`g'GWX`\emptysetggY``ni\ f'K\ YhhVYk\ YfVgZA\][\ \_Y]h$   $]b'8U'BUb[\ 'Yf\_Ubbh''$ 

Ni gÀhn`]W\ k ]fX XUgʻ8 UʻB Ub [  $^{\pm}$ bhYfb Uh]c b U`: ]fYk cf\_gʻ: Ygh]j U` &\$&) 'f8 \( \delta : ^&\$&) Ł Ub [ Y\_ØbX][ hž XUgʻYVYb ZU``gʻ5 F!HYW\ bc`c [ ]Y ]bhY [ f]YfYbʻgc``"Ni gW\ Ui Yfʻ\ UVYbʻX]YʻA Ò[ `]W\\_Y]hž DUd]Yfh]W\_Yhg a ]hʻXYfʻGi bʻDUfUX]gYʻ@UbX!5ddʻni ʻgWUbbYbžʻi a ʻ]bʻY]bYbʻJ ]fhi U`! FYU`]hm!FUi a ʻY]bni hfYhYbʻi bXʻ; YgW\ ]W\ hYbʻØVYfʻ8 UʻB Ub [ `ni Yf`YVYb"ʻGYW\ gʻG\ck gʻXYgʻ: Ygh]j Uʻgʻk YfXYbʻj YfgW\ ]YXYbYʻ5 F! H\Ya Ybʻ\Yfj cf\YVYbʻi bX`X]YʻGW\ Òb\Y]hʻXYfʻGhUXh'ni fʻGW\ Ui ghY``Ybž'k UgʻX]Yʻ\_i `hi fY``Ybʻ5 hhfU\_h]cbYbʻ8 UʻB Ub [ gʻk Y]hYfʻghÀf\_Yb k ]fXž'k ]YʻJ ]Yhb Ua d`i gʻ\]bni ZØ[ h"

| 8 YhU]`g |                          |
|----------|--------------------------|
| Cfh      | 8UBUb[žJ]YhbUa           |
| Ei Y``Yb | • k k k "j ]Y hb Ua "j b |
|          | • Yb"j]YhbUa d`i g"j b   |

6Ygi WXYb G]Y i bg Ui Z. Y]bY!fY]gY "XY