

ы b[Yf'FUgYf'Z`]Y\h'j cf'Dc`]nY]'i bХ j YfghYW_h'g]WX ']a 'HUI].': YghbU\a Y°

±b :: Uj cf]hY b 'Z'ØW\ hY hY 'Y]b '&%! À\f][Yf'j cf'XYf'Dc`]nY]'i bX j YfghY W_hY 'g]W\ ']a 'HUI]ž'bUW\ XYa 'Yf'c\bY': Ø\fYfgW\Y]b _cbhfc``]Yfh'k i fXY"



Hf]YghYf'GhfU» Yž'%%\$\$ 'K]Ybž'² ghYffY]W '! '5a 'GcbbhU[ž'XYa &- "'≯ b]ž'gcf[hY 'Y]b 'J cfZU``]b 'XYf'Hf]YghYf'GhfU» Y ']b : Uj cf]hYb 'ZØf 5i ZfY[i b["'6Y] Y]bYf'J Yf_Y\fg_cbhfc``Y'Z]Y``Y]b '&'l 'À\f][Yf'D_k! @Yb_Yf'a]h'gY]bYf'U[[fYgg]j Yb : U\fk Y]gY 'Ui Z"'8 Yf A chcffUXdc`]n]ghž'XYf']\b 'Ub\]Y'hž'ghY``hY'gW\bY``ZYghž'XUgg'XYf' '\ b[Y'A Ubb'_Y]bYb : Ø\fYfgW\Y]b 'VYgU» 'i bX'g]W 'XYb'6YUa hYb [Y[YbØVYf'i b_ccdYfUh]j 'j Yf\]Y'h"'8 cW\ 'XUg'k Uf'`Ub[Y'b]W\h U``Yg. '9]bY', VYfdfØZi b['cZZYbVUfhYž'XUgg'[Y[Yb 'XYb'&'!-À\f][Yb Y]bY'cZZYbY'GhfUZU_hY']b 'j]YfghY``][Yf'<Ò\Y'j cf`U["'5`g'X]Y Dc`]n]ghYb']\b 'ZYghbY\a Yb'k c``hYbž'k Y\fhY'g]W\ 'XYf': U\fYf j Y\Ya Ybh'i bX'[Y`Ub['Ui Z[fi bX'gY]bYf'? ÒfdYf_fUZh'ni 'Z']Y\Yb"'-\&\XYf'<]hnY'XYg'; YZYW\hg'k i fXY'gcZcfh'Y]bY': U\bXi b['Y]b[Y`Y]hYh'"

 $8 \ Yf: \ U``bU\ a \ Y]bY'ibYfk \ UfhYhY'K \ YbXib[\ \check{z}'U`g'Y]b'HUI]ZU\ fYf'X]Y \ Dc`]nY]']bZcfa \]YfhY\check{z}'XUgg'g]WX'XYf': `ØWXh][Y'j YfghYW_h']a :: i » fUi a gY]bYg'HUI]g'VYZ]bXY'''Gc _cbbhY'X]Y'Dc`]nY]'XUg'HUI]'Ub\U`hYbž \ YXcWX'j Yfgi WXhY'XYf'&\%!-\A\f][Y'YfbYih'ni 'Z]Y\Yb'ibX'k ifXY gWX`]Y » `]WX'XcWX'ZYgh[Ybca a Yb'''-\a\ a 'k ifXYb'a Y\fYfY'Jcfk \ ØfZY [Ya UWXhž'XUfi bhYf'K]XYfghUbX'[Y[Yb'X]Y'GhUUhg[Yk U`h'ibX j Yfgi WXhY'gWXk YfY'? ÒfdYfj Yf`Yhni b["'5i WX'JYfghÙ) Y'[Y[Yb j Yf_Y\fgdc`]nY]`]WXY'JcfgWXf]ZhYb'k ifXYb']\a'ni f'@Ugh'[Y`Y[h'' 8 Yf'[UbnY'JcfZU``'nY][hž'k]Y'gWXbY``Y]bY'JYf_Y\fg_cbhfc``Y']b'Y]b V]nUffYg'? Uhn!ibX!A Ui q!Gd]Y`'j Yfk UbXY`b'_Ubb''$

FYWX h`]WXYf'?cbhYlh

8]Y: i Whij cf:XYf:Dc`]nY]']gh'_Y]b'? Uj U`]YfgXY`]_hi bX'_Ubb gWk Yfk]Y[YbXY'fYWkh`]WkY: c`[Yb'bUWk'g]Wk'n]Y\Yb"'@Ui h'XYa' 6i gg[Y`X_UhU`c['_ObbYb'Dc`]nY]VYUa hY: U\fnYi [ZØ\fYf Ub\U`hYbži a 'VY]gd]Y`gk Y]gY: Ø\fYfgWkY]b'i bX
Ni `Uggi b[gVYgWkY]b][i b['ni 'ØVYfdfØZYb"'Gc``hY'Y]b': U\fYf'XUg <U`h[YVch'a]ggUWkhYbž'Xfc\Yb']\a'b]Wkh'bi f'; Y`XVi » Ybž'gcbXYfb Ui Wk'Di b_hY']b': `YbgVi f["'6YgcbXYfg'VfYbn`]['k]fX'Ygž'k Ybb Ya UbX'_Y]bYb'[Yf]b[Yb'K]XYfghUbX'`Y]ghYh'@Ui h'z'%%' 'Gh 6 _Ubb'X]Yg'gY\f'Yfbgh\UZhY'?cbgYei YbnYb'bUWk'g]Wk'n]Y\Ybž'X]Y i cb'; Y`X!'V]g'ni ': fY]\Y]hqqhfUZYb'fY]WkYb"

9]b 'V`c» Yg'K Y[ZU\fYb'[]`h'XUVY]'b]W\h'U`g': `i W\hžgcbXYfb'Yfghž k Ybb'hUhgÀW\`]W\'[Yk U`hgUa Yf'K]XYfghUbX'[Y`Y]ghYh'k]fX"'8]YgYf fYW\h']W\Y'FU\a Yb'k i fXY'i bhYf'UbXYfYa ']a 'FU\a Yb'Y]bYg': U``g j cf'XYa '6i bXYg[Yf]W\hg\cZ'fb; < \t'df\n]g]Yfh''8 cfh'ghY``hY'a Ub__`Ufž'XUgg'K]XYfghUbX'bi f'XUbb'j cf']Y[hž'k Ybb'X]Y'5_h]cb'XYg H\hYfg'Y]bY'U_h]j Y'< UbX`i b['a]h'B\h)[i b[gW\UfU_hYf']ghž'X]Y'X]Y J c``ghfYW_i b[ga U» bU\a Y'XYf'Dc`]nY]'j Yf\]bXYfh'cXYf'YfgW\k Yfh'' 8 Yf'5bk U`h'6Yf`]b'ZØf'GhfUZfYW\h'Xc_i a Ybh]YfhYž'XUgg : `i W\hj Yfgi W\Y'c\bY'j cfg\hm`]W\Y'; Yk U`h'[Y[Yb'X]Y'6YUa hYb a Y]gh'\Ufa `cgYf'VYk YfhYh'k YfXYb"

9]b nk Y]hYf J cfZU``]b A Y]X`]b[

 $\label{eq:byb} Bi\ f'Y]bYb'HU[\ 'ni\ j\ cf'k\ Uf'Y]b''(\ \%!\ 'Å\ f][\ Yf'D_k\ !@Yb_Yf']b''A\ Y]X`]b[$

]bg'BYhn'XYf'Dc`]nY]'[Y[Ub[Yb"'5i W. Yf'\UhhY'_Y]bY 5i gk Y]gdUd]YfY'XUVY]'i bX'[UV'ZU`gWXY'5b[UVYb'j cb'g]W."'6Y] gY]bYf', VYfdfØZi b['ghY``hY'g]W.'\YfUi gž'XUgg'[Y[Yb']\b'Y]bY : YghbU\a Yj YfcfXbi b['VYghUbXYb'\UhhY'i bX'Ui W.'Yf'c\bY [Ø`h][Y'@Yb_VYfYWXh][i b['i bhYfk Y[g'k Uf"'9]b'JYfXUWXh'Ui Z Gi WXha]hhY`VYY]bZi ggi b['ZØ\fhY'ni 'Y]bYf'Ua hgÀfnh`]WXYb I bhYfgi WXi b["'8Yf'(%!À\f][Y'k i fXY'`Yhnh`]WX']b'Y]bY'\$ gh]nUbghU`h [YVfUWXh'i bX'Yf\]Y`h'a Y\fYfY'5bnY][Yb"

8]YgY'VY]XYb'JcfZÀ``Y'g]bX'bi f'X]Y'Gd]hnY'XYg'9]gVYf[gžk Ybb'Yg i a 'XUg'H\Ya U'JYf_Y\fg_cbhfc``Yb'i bX'X]Y'XUa]h'j YfVi bXYbYb fYWkh`]WkYb'?cbgYei YbnYb'[Y\h"'9g'V`Y]Vh'UVni k UfhYbžk Y`WkY k Y]hYfYb'; YgWk]WkhYb'X]Y'K]YbYf'Dc`]nY]']b'XYf'Ni _i bZh'ni YfnÀ\`Yb'\Uhž'XYbb'Y]bYg']gh'g]WkYf.'K Yf'[Y[Yb'XUg'; YgYhn j YfghÒ» hž'n]Y\h'X]Y'5i Za Yf_gUa _Y]h'XYf'6YUa hYb'Ui Z'g]Wkž'i bX XUg'_Ubb'k Y]hfY]WkYbXY': c`[Yb'a]h'g]Wk'Vf]b[Yb"

| 8 YhU]`g | |
|----------|---|
| Cfh | Hf]YghYf'GhfU»Yž'%%\$\$'K]Ybž'2ghYffY]WX |
| EiY``Yb | • k k k "a Y]bVYn]f_"Uh |
| | k k k "Vi gg[Y`X_UhU`c["cf[|
| | • k k k "Ubk U`h!VYf`]b!ghfUZfYW\h"XY |

6Ygi WXYb G]Y i bg Ui Z. a Y]b!k]Yb bYh