

?fUk U```]a :: fY]VUX 'Gh" 'K YbXY`. 'Dc`]nY] [fY]Zh'Y]b i bX'gW\`]Y» h'6UX °



Gh'K YbXY`ž'8Yi hgW `UbX'! 5a 'GUa ghU[UVYbXž'XYa '%("'\$b] &\$&) ž'_Ua 'Yg']a ': fY]VUX'Gh''K YbXY`ni 'Y]bYa 'JcfZU``ž'XYf'b]Whbi f'X]Y'6UXY[ÀghY'YfgWkfYW_hYž'gcbXYfb'Ui Wk'Y]bYb'[fÒ» YfYb Dc`]nY]Y]bgUhn'bUWk'g]Wk'nc["'6YgcbXYfg'VY]'gca a Yf`]WkYb HYa dYfUhi fYb'ØVYf'' \$'; fUX'k Uf'XUg'6UXž'[YZØ``h'a]h': Ua]`]Ybž \$\forall [YbX`]WkYb'i bX'GYb]cfYbž'[i h'VYgi Wkh''; Y[Yb'%-'I \forall Yg_U`]YfhY'Y]bY'5i gY]bUbXYfgYhni b['nk]gWkYb'Yhk U'&\$ \$\forall [YbX`]WkYbžj cfk]Y[YbX'a Àbb`]Wkž'Ui Z'XYf'@]Y[Yk]YgY'XYg 6UXgž'k]Y'gc`"XY'VYf]WkhYh"

8]Y``Ui hghUf_Y`GW\`À[YfY]`nc['b]W\h'bi f`X]Y`5i Za Yf_gUa _Y]h`XYf 5bk YgYbXYb`Ui Z'g]W\ž'gcbXYfb`gcf[hY`Ui W\`ZØf`Ya ch]cbU`Y FYU_h]cbYb"`9]b][Y`A ÀXW\Yb`k Y]bhYbž'k À\fYbX`U[[fYgg]j Yg GWki VgYbii bXi`Ui hYi6YgWk]a dZi b[YbiØVYfiXYbiD`Uhni\U``hYb":8]YFYU_h]cbYbiXYfi6UXY[ÀghYik UfYbi[YdfÀ[hij cbiGWkcW_ii bXlbfi \Yžij]Y`Y:: Ua]`]Ybia]hi?]bXYfbinc[Ybig]Wki\Ugh][ini fØW_žiU`gX]YiG]hi Uh]cbiUi »Yfi?cbhfc``Yi[Yf]Yh"

$Dc^{n}Y]Y]bgUhn^{i}bX^{i}Zf\emptyset Y^{i}GW^{i}Y^{i}b[$

5i Z[fi bX'XYf'VYi bfi \][YbXYb'G]hi Uh]cb'YbhgWk]YXYb'g]Wk'X]Y
J YfUbhk cfh`]WkYb'XYg': fY]VUXgž'XUg'6UX'Y]bY'\U'VY'Ghi bXY
ZfØ\Yf'U'g'[Yd`Ubh'ni 'gWk`]Y» Yb"'8]Y'5i ZfÀi a UfVY]hYb'i bX
♣bhYfj]Yk g'a]h'NYi [Yb'i bX'6YhY]`][hYb'ghUfhYhYb'i ba]hhY`VUf
bUWk'XYa '9]bhfYZZYb'j cb'nk Y]'Dc`]nY]ghfY]ZYbk U[Ybž'X]Y'j cf'Cfh
ZØf'Fi \Y'gcf[hYb"'; Y[Yb'%-.' \$'I \f'k i fXYb'U``Y'; ÀghY
Ui Z[YZcfXYfhž'XUg': fY]VUX'ni 'j Yf`UggYb"'8]Y'Dc`]nY]'Gh"'K YbXY`
\Uh'V]g\Yf'_Y]bY'♣bZcfa Uh]cbYb'ni 'XYb'<]bhYf[fØbXYb'XYf
5i gY]bUbXYfgYhni b['j YfÒZZYbh`]Wkhi bX'j Yfk Y][YfhY'Y]bY
cZZ]n]Y``Y'GhY``i b[bU\a Y'ni a '9]bgUhnž'VYf]WkhYhY'X]Y'FYXU_h]cb
XYg'6`Ui`]WkhfYdcfhg"

 $K]Y Yg k Y]hYf[Y hž V Y]Vh i b_`Uf" 8 Yf 5 i g`ÒgYf XYf 5 i gY]bUbXYfgYhni b[']gh bc W ; Y[YbghUbX'j cb'9fa]hh`i b[Ybž X]Y a]hh`Yfk Y]`Y Y]b[Y`Y]hYh`k i fXYb" <math>\Rightarrow$ XYb bAWXghYb HU[Yb k]``X]Y Dc`]nY]ZØ\fi b['Y]bY'9bhgWXY]Xi b['ØVYf X]Y J YfÒZZYbh`]WX i b[k Y]hYfYf \Rightarrow Zcfa Uh]cbYb hfYZZYb" \Rightarrow XYf'2 ZZYbh`]WX_Y]h'[]Vh'Yg YXcWX VYfY]hg'?f]h]_'Ub'XYf'a Ub[Y`bXYb'HfUbgdUfYbn'i bX'XYf \Rightarrow Zcfa Uh]cbgdc`]h]_'XYf'Dc`]nY]"

9]b HfYbX]a : fY]VUX3

8 Yf J cf Zu``]a : fY]VUX 'Gh"'K YbXY`fY]\hig]W\]b Y]b Y VYgcf[b]gYffY[YbXY'GYf]Y j cb '[Yk U`hhÀh][Yb 5 i gY]bUbXYfgYhni b[Yb]b 'XYi hgW\Yb : fY]VÀXYfb 'Y]b "'Ÿ\b`]W\Y J cf ZÀ``Y'[UV 'Yg'_Øfn`]W\ 'Ui W\]b '6 Yf`]bž'k c 'Y]b 'GW\k]a a VUX 'bUW\Y]bYf'GW\`À[YfY]'[YgW\`cggYb 'k YfXYb 'a i gghY"'Gc`W\Y J cf_ca a b]ggY 'k YfZYb : fU[Yb 'ni f'G]W\Yf\Y]h'i bX 'XYa 'I a [Ub[a]h'; Yk U`h']b : fY]nY]hY]bf]W\ hi b[Yb'Ui Zi bX'_ObbhYb'X]Y Gh]a a i b[']b 'XYb'VY`]YVhYb'Gca a YfcfhYb'bUW\\U`h][VYY]bZi ggYbž'k]Y'Ui W\`gd]Y[Y`"XY'VYf]W\ hYh"

8]Y'FYXU_h]cb'XYg'6`Ui`]W\hfYdcfhg'\Uh'X]Y'2 ZZYbh`]W_Y]h
Ui Z[Yfi ZYbž'\Dzcfa Uh]cbYbž'6]`XYf'cXYf'J]XYcg'ni 'XYa 'JcfZU``
Y]bni gYbXYbž'i a 'Y]b'i a ZUggYbXYfYg'6]`X'XYf'; YgW\Y\b]ggY'ni
Yf\U`hYb"'A Ub'V`Y]Vh'[YgdUbbhž'k]Y'g]W\'X]Y'G]hi Uh]cb
k Y]hYfYbhk]W_Y`h'i bX'k Y`W\Yb'9]bZi gg'gc`W\Y'JcfZ\``Y'Ui Z'X]Y
G]W\Yf\Y]hgghfUhY[]Yb']b': fY]nY]hY]bf]W\hi b[Yb'\UVYb'k YfXYb"

8YhU]`g	
Cfh	Gh'K YbXY`ž'8Yi hgWX`UbX
EiY``Yb	• k k k "gc`"XY
	V`Ui `]W\ hfYdcfh!gUUf`UbX"XY
	• k k k "gd]Y[Y`"XY

6Ygi WXYb G]Y i bg Ui Z b!U["XY