

## 6i bXYg[Yf]WX h'YbhgWXY]XYh'ØVYf'JYfVch XYg'fYWX hgYl hfYa Yb 7ca dUWh !A U[Un]bg°

8 Ugʻ6i bXYgj Yfk Uʻhi b[g[Yf]Wkhij Yf\UbXY`hʻUV'%\$"'¾ b]'&\$&) ØVYfʻXUgʻJ YfVchʻXYgʻfYWkhgYl hfYa YbʻA U[Un]bgʻ 7ca dUWh ž XUgʻ6YXYb\_Ybʻni fʻDfYggYZfY]\Y]hʻUi Zk]fZh"



@Y]dn][ ž8Yi hgW `Ub X '! '8 Ug '6i b XYgj Yfk U`hi b[ g[ Yf]W\h']b @Y]dn][ 'gYhnh'g]W\ 'UV 'XYa '%\$"'\ddots b] '&\$&) 'a ]h'XYa 'J YfVch'XYg fYW\hgYl hfYa Yb 'A U[ Un]bg' 7ca d UWh 'Ui gY]b Ub XYf"'8 Ug 'A U[ Un]b k Uf 'Ua '%\* "'\ddots ']'&\$&( 'Xi fW\ 'X]Y 'XUa U`][ Y '6i b XYg]b b Yba ]b]ghYf]b B Ub Wm: UYgYf 'fGD8 Ł'U`g' nYb hfU`Yg 'GdfUW\fc\f'XYf fYW\hgYl hfYa ]gh]gW\Yb 'GnYbY 'j YfVchYb 'k cfXYb"'@Ui h'Y]b Ya 6Yf]W\h'j cb 'A Yf\_i f'Z\(\infty\)\fhY 'XUg'J YfVch'ni f'gc Zcfh][ Yb '9]bghY``i b[ XYg'[ YgUa hYb 'Df]bhl'i b X'C b`]b YUb[ YVchg'j cb' 7ca d UWh "

8]Y'JYfVchgjYfZØ[ib['VYn]Y\h'g]W\'UiZ'6YXYb\_Ybž'XUgg'X]Y DiV`]\_Uh]cbYb'ni'<UbX`ib[Yb'[Y[Yb'X]Y'jYfZUggib[ga À»][Y CfXbi b[ 'UbfY[ Yb'\_ObbhYb" 8 Ug'A YX]Ybi bhYfbY\a Yb'k ]fX'j ca
J YfZUggi b[ ggWli hn'U`g'[ Y[ Yb'X]Y'6i bXYgfY[ ]Yfi b[ 'i bX'XUg
dc`]h]gWlY'GmghYa 'U[ ]YfYbX'Y]b[ Yghi Zh"6]g'9bXY'&\$&%'k Uf
7 ca dUWh 'U`g'[ Yg]WlYfh'fYWlhgYI hfYa ]gh]gWlY'J YfY]b][ i b[
\_`Ugg]Z]n]Yfh'k cfXYb"'@Ui h'HU[ YggWl Ui 'd`UbhY'XUg
6i bXYg]bbYba ]b]ghYf]i a 'VYfY]hg'ni j cf'Y]b'JYfVchž'XYggYb'YfghYf
J Yfgi Wl']a '\$\frac{1}{2}\cdot \frac{1}{2}\cdot \f

## FYWXh`]WXY'5igY]bUbXYfgYhnib[

BUWXXYa 'XUg'J YfVch'Yf`UggYb'k i fXYž'fY]WX hYb'X]Y'VYhfcZZYbYb I bhYfbY\a Yb' 7ca dUWhIA U[Un]b'; a V< 'i bX' 7cbgdYWh': ]`a; a V< ž'VY]XY'i bhYf'XYf'@Y]hi b['j cb' \$\alpha f[Yb'9\gangagYfz']a 'Gca a Yf &\$&('?\U[Y'i bX'9]\Ubhf\[A][Y'[Y[Yb'X]Y'JYfZ\[O][i b['Y]b''8Yf'\*'' GYbUh'XYg'6i bXYgj Yfk U\hi b[g[Yf]\WX\hg'\[A] \*\yfhY']a '9]\'j YfZ\[Yb'\]\fYb 6YXYb\_Yb'\]bg]\WX\[XYf'JYf\[A\hb]ga \[A\alpha\][\_Y]h'XYg'JYfVchg''8]Y DfYggYZfY]\Y]h'a \[OggY'[Yk U\fh'V\Y]VYbz'k \[A\fYbX'XUg'; Yf]\WX\hX]Y 6YXYi hi b['XYf'AY]bi b[g\[A\alpha\] \*\yfi b[']b'X]YgYa '?cbhYl h'VYhcbhY''

## =b\U`h`]WXY'Jcfk ØfZY'i bX'JYfZUggi b[ggWXi hn

8 Ug·6i bXYg]bbYba ]b]ghYf]i a `\Uh` 7ca dUWh 'U`g`U[ [fYgg]j! \_Aa dZYf]gW\ i bX'j YfZUggi b[ gZY]bX`]W\ Y]b[ Yghi Zh" 8 UgʻA U[ Un]b gY] XUZØf 'VY\_Ubbhž Ubh]gYa ]h]gW\ YžfUgg]gh]gW\ Yž a ]bXYf\Y]hYbZY]bX`]W\ Y i bX'[ YgW\]W\ hgfYj ]g]cb]gh]gW\ Y`gck ]Y j YfgW\ k Ofi b[ gh\ YcfYh]gW\ Y`\D\ hY ni 'j YfVfY]hYb" \D`XYf JYf[ Ub[ Yb\Y]h'k i fXYb nU\`fY]W\ Y`fYW\ hgYl hfYa Y`Cf[ Ub]gUh]cbYb j YfVchYb" Ni a '6Y]gd]Y`k i fXYb' 7ca VUh'\%, '8Yi hgW\`UbX 'i bX X]Y` K Y]ggY`K O`ZY`HYffcfWfYk ']b`XYb``YhnhYb`\J\fYb`Xi fW\`XYb

=bbYba ]b]ghYf'j YfVchYbž'k Ug'nY][ hž'XUgg'X]Y'6Y\OfXYb
\_cbgYei Ybh'[ Y[ Yb'YI hfYa ]gh]gW\Y'; fi dd]Yfi b[ Yb'j cf[ Y\Yb"

K ]Y 'Ui g'XYb'5b[ UVYb'XYg'J YfZUggi b[ ggWki hnYg'\Yfj cf[ Y\hž `]Y[ Yb'Ui Wk'VY]' 7ca dUWh '5b\U`hgdi b\_hY'ZØf'J Yf`Yhni b[ Yb'XYf A YbgWkYbk ØfXY']b'Y]bnY`bYb'HYI hYb'j cf/'U``YfX]b[ g'V'Y]Vh'cZZYbž cV'X]YgY'Ui gfY]WkYbž'i a 'XUg'J YfVch'ni 'fYWkhZYfh][ Yb"'8 Ug 6i bXYgj Yfk U`hi b[ g[ Yf]Wkh'\Uh'V]g'XUhc'bi f'Ni [ f]ZZ'Ui Z'Y]bYb'HY]`XYf'Di V`]\_Uh]cbYb'[ Y\UVhž'i bX'Yg'k ]fX'Yfk UfhYhž'XUgg'k Y]hYfY 9f\_Ybbhb]ggY'Ui g'VYgWk`U[ bU\a hYb'5ggYfj UhYb'[ Yk cbbYb k YfXYb'\_ObbhYb"

8 UgʻJ YfZU\fYbʻfi bXʻi a ʻXUgʻJ YfVchʻj cbʻ 7ca dUWhʻ\Uhʻb]W\hʻbi f

1 f]gh]gW\YʻF YʻYj UbnžʻgcbXYfbʻgd]Y[YʻhʻUi W\ʻX]Yʻ\_ca dʻYl Y

8 YVUhhYʻØVYfʻ; fYbnYbʻXYfʻA Y]bi b[gZfY]\Y]hʻi bXʻXYbʻ? Ua dZ

[Y[YbʻF YW\hgYl hfYa ]ga i gʻ]bʻ8 Yi hgW\`UbXʻk ]XYfʻ'8]Yʻ8]g\_i gg]cb

k ]fXʻg]W\Yf`]W\ʻUi W\ʻ]bʻXYbʻ\_ca a YbXYbʻHU[Ybʻk Y]hYfʻUb

\$hYbg]hAhʻ[Yk]bbYbžʻk A\fYbXʻXUgʻ; Yf]W\h'ni 'Y]bYfʻ9bhgW\Y]Xi b[\_ca a Ybʻ\_ObbhY''

8 YhU]`g	
J cfZU``	JYfY]bgjYfVch
I fgUWX Y	fYWXhgYIhfYa]gh]gWXY°=b\U`hY
Cfh	@Y]dn][ž'8YihgWX`UbX
EiY``Yb	• k k k "a Yf_i f"XY
	• kkk"hU[YggW\Ui"XY
	<ul><li>kkk"jYfZUggib[ggW\ihn"XY</li></ul>

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