

## Nk Y]hYf 5b`Ui Z. 5i gVUi 'XYf 6&+' 'VY] BUi Yb b]a a h: U\fh'Ui Z°

8 Yf 5 i gVUi "XYf 6 & + ' "VY] BUi Yb "ghY\h "VYj cf."; Yd `UbhY 6Ui a U» bU\a Ybž BUhi fgW\i hnž i bX 6 YhY]`][ i b[ 'j cb 'B 5 6 I ]a ': c\_i g"



6 Ofb]W\_Y 2 8 Yi hg W `Ub X '! 8 Yf @Ub X Yg V Yhf]Y V 'GhfU "Y bk Yg Y b '\ Uh k ]Y X Yf 'Zf]g W X Yb 'K ]b X Y b 'D `Ub 'ZØ f 'X Y b '5 i g V Ui 'X Y f 6 i b X Y g g h f U "Y b '[ Y V f U W h '' 8 Y f 'V Y h f c ZZ Y b Y 5 V g W X b]hh 'Y f g h f Y W\_h 'g] W 'j c b 'X Y f '9] ba Øb X i b [ 'X Y f '@ & \$ % f b f] Y g Y `Ub [ Y f 'Gh f U "Y E V ]g 'n i a 'C f h g Y] b [ Ub [ 'j c b '6 Ofb] W\_Y 'i b X i a Z U g g h 'Y h k U 'j ] Y f Y] b \ U `V '? ] `ca Y h Y f " @Ui h a Un! c b `] b Y "X Y 'g c `` X Y f '6 U i V Y [ ] b b 'Y X c W 'Z f Ø \ Y g h Y b g 'Z Ø f '& \$ & , 'j c f [ Y g Y \ Y b 'g Y] b z X U n i b A W g h 'X U g 'Y f Z c f X Y f `] W Y 'D `Ub Z Y g h g h Y ``i b [ g j Y f Z U \ f Y b U \ [ Y g W `c g g Y b 'k Y f X Y b 'a i g g " : f Ub \_ G W a ] X h 'j ca '@ Ub X Y g V Y h f] Y V \ Uh 'g ] W 'j c f [ Y b ca a Y b z b c W '] b 'X ] Y g Y a ' \ \ Uh 'g ] W 'j c f [ Y b Ca a Y b z b c W '] b 'X ] Y g Y a ' \ \ \ \ Uh 'g ] Y b 'J c f V Y f Y ] h 'b [ Y b 'n i 'g h U f h Y b ''

8]Y 8Ui Yf XYg D`Ub ZYghghY``i b[gj YfZU\fYbg k]fX Ui Z'nk Y] V]g

nk Y]Y]b\U`V`\J\fY`[Yg\X\Ahnhž`UV\Ab[]['jcb`XYf`5bnU\``ibX`5fh
XYf`Y]b[YfY]\X\hYb`9]bk YbXib[Yb"'Jcf'\_ifnYa `ZUbX`Y]b
5\ygh]a a i b[ghYfa]b`a]h`AYX]\YbhfA[Yfb`ghUhhž`VY]`XYa `Yg`ia `X]Y
@U[Y'jcb`JYfgcf[ib[g`Y]hib[Yb`ZØf`Ghfcaž; Ugž\bhYfbYhž`K UggYf
ibX`5\Vk UggYf`[]b["'8]Y`hY\X\b]g\X\Y`D`Ubib[`XYf`GhfU\y\Y`]gh
\VYfY]hg`UV[Yg\X\`cggYb`ibX`Yg`g]bX`a]bXYghYbg`XfY]
?fY]gj Yf\_Y\fY`]a `JYf`UiZ`XYf`GhfY\\Y\Y`[Yd`Ubhžia `X]Y`5bV]bXib[
ni `Yf`Y]\X\hYfb"'8UfibhYf`g]bX`Y]b`?fY]gj Yf\_Y\f`Ub`XYf`?fYinib[
@\\$\%\\&+' `gck]Y`nkY]`kY]hYfY`nif`5bV]bXib[`XYf`K U`Xg]YX`ib[
ibX`XYf`GhfU\y\Y`bU\X\?]YbVYf["

## K]XYfghUbXibXBUhifgWXihn

8]Y'6YXYi hi b['XYg'BUhi fgWi hnYg'k]fX'b]Wh'bi f'j cb'XYb
J YfVÀbXYbž'gcbXYfb'Ui Wh'[YgYhn`]Wh'\Yfj cf[Y\cVYb"'8Yf'B56I
\Uh'Y]b' \(\frac{1}{2}\)Zcfa Uh]cbg!'i bX'A]hk]f\_i b[gfYWh']b'i a k Y`hfY`Yj UbhYb
J YfZU\fYbž'XUg'gY]h'&\$\$-']a'z'\*''6BUhGW;'j YfUb\_Yfh']gh"'8]Yg
[]`h'i bhYf'UbXYfYa'ZØf'D`UbZYghghY``i b[gj YfZU\fYbž
J Y[YhUh]cbggWhi hnj YfcfXbi b[Yb'i bX'5fhYbgWhi hndfc[fUa a Y"
5b[Y`U'?fØhnZY`Xhž'X]Y'5bgdfYWhdUfhbYf]b'VY]'B56I ž'Yfa i h][h'U``YBUhi f!'i bX'I a k Y`hgWh@hnYf'ni f'A]hk]f\_i b["

## 8 Y f 'K Y [ 'ni f'; Y b Y \ a ] [ i b [

 $8 \ Yf'J \ Yf'Ui \ Z'XYg'D`Ub ZYghghY``i b[gj \ YfZU\ fYbg'k]fX'U`gc YbhgWXY]XYb X'gY]b'ZØf'X]Y'Ni _i bZh'XYg'GhfU» Ybdfc <math>\Upsilon_hg']b'BUi \ Yb''$   $8 \ Y'FY`Yj \ Ubn'XYf'6 \ Øf[YfVYhY]`][i b['i bX'XYf'9]bZi gg'XYf I a k Y`hj YfVAbXY'Ui Z'X]Y'D`Ubi b['g]bX'b]WXh'ni 'i bhYfgWXAhnYb'' = a Yf\]b'\UVYb'X]YgY'9]b[f]ZZY'b]WXh'bi f'5i gk]f_i b[Yb'Ui Z'X]Y I a [YVi b[ ž'gcbXYfb'Ui WX'Ui Z'X]Y'5_nYdhUbn'XYg'Dfc <math>\Upsilon_hg']b'XYf'$  6Yj  $O`_Yfi b['''5V[YgY\Yb'XUj cbž'_Ubb'Yg'Ui WX'ni 'fYWXh`]WXYb GWXf]hhYb'_ca a Ybž'ZU``g'_f]h]gWXY'9]b[f]ZZY'b]WXh'cfXbi b[g[Ya A` Y\UbXY`h'k YfXYbž'k Ug'VYfY]hg'VY]'UbXYfYb'[fc Yb D`Ubi b[gdfc <math>\Upsilon_hYb'$ k]Y'XYf'5&\$'XYf': U```k Uf''}

9]b'k]Wkh][Yg'9'Ya Ybh'XYg'JYfZU\fYbg'']Y[h'Ui W\'VY]'XYb
\_ca a i bU'Yb'D'Ubi b[Ybž'X]Y'cZh'b]Wkh'Ui gfY]WkYbX'Ò\_c`c[]gWk
Xi fWkXUWkh'g]bX"'8Ug'\_Ubb'VY]gd]Y`gk Y]gY'X]Y'JYfg]W\_Yfi b['j cb
FY[Ybk UggYf'VYhfYZZYb"': YUhi fYž'X]Y'Xi fWk'X]Y'B56I!6YhY]`][i b[
Yj Ybhi Y```ØVYfXUWkh'i bX'j YfVYggYfh'k YfXYb'\_ObbYb"'8Ug
9b[U[Ya Ybh'XYf'9\fYbUa h']WkYb'VY]a 'B56I'k]fX'U`g
YbhgWkY]XYbX'ZØf'XYb'GWki hn'XYf'BUhi f'\Yfj cf[Y\cVYb"

Gc 'V `Y]Vh']a '<]bV`]W\_'Ui Z'XYb'5i gVUi 'XYf'6&+' 'UVni k UfhYbž'k]Y X]Y'bÀW ghYb'GW f]hhY'j Yf`Ui ZYb'k YfXYb"'8Yf'9fZc`['i bX'X]Y I a gYhni b['XYg'Dfc Y\_hYg'\Àb[Yb'gW\`]Y»`]W\'j cb'nU\`fY]W\Yb : U\_hcfYb'UV"'5VYf'Y]bYg']gh'g]W\Yfž'X]Y'8]g\_i gg]cb'i a 'XYb'GW\i hn XYg'BUhi ffUi a g'k]fX'kY]hYf[Y\Yb"

K Y]hYfY' ⇒ Zcfa Uh]cbYb'ni 'XYb'l a k Y`hdfØZ b[Yb'g]bX'i bhYf' Vi bXYgi a k Y`ha ]b]ghYf]i a "XY'ni 'Z]bXYb"

8 YhU]`g	
Cfh	6Òfb]W_Yž'8Yi hgWX`UbX
EiY``Yb	• k k k "a Un!cb`]bY"XY
	<ul><li>gWX`Ygk ][!\c`ghY]b"bUVi "XY</li></ul>
	• k k k "Vi bXYgi a k Y`ha ]b]ghYf]i a "
	XY

## 6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'b!U[ "bYh