

: fUbnÒg]gWX Y D]`chYb ``UbXYb i bYfk UfhYh]b '9``k Ub[Yb.; Yk]hhYf nk]b[h'ni f DUi gY

' + 'ZfUbnÒg]gWXY'D]`chYb'`UbXYhYb'Ui Z[fi bX'j cb'; Yk]hhYf'Ua ("'¾ b]'&\$&) 'i bYfk UfhYh'Ui Z'XYa ': `i [d`Uhn'9fdZYbhU`']b 9``k Ub[Yb"

: `i [d`Uhn`9fdZYbhU`ž'+' (+- '9``k Ub[Ybž'8Yi hgWk`UbX'!5a ("'**jb]'&\$&) ``UbXYhYb'' + 'ZfUbnÒg]gWkY'D]`chYb'ØVYffUgWkYbX'Ui Z XYa :: `i [d`Uhn'9fdZYbhU`']b'9``k Ub[Yb"'8]Y'; fi ddYž'X]Y'a]h'&\$: `i [a UgWk]bYb'i bhYfk Y[g'k Ufž'[Yf]Yh'Ui Z[fi bX'Y]bYg'I bk YhhYfg]a '@ ZhfUi a 'ØVYf': fUb_Yb'i bX'XYf'A Yhfcdc`fY[]cb'BØfbVYf[']b GWkk]Yf][_Y]hYb"'8Yf': `i ['k Uf'HY]`']\fYg'Dfc'Y_hgž'XUg'g]Y'i bhYf XYa 'A chhc': `i ['XYf'5X`Yf 'Xi fWkZØ\fhYb"'8Yf'GhUfh'YfZc`[hY'j ca <Y]a UhZi [d`Uhn'5a]Ybgž'bÒfX`]Wk'j cb'DUf]gž'a]h'Y]bYf'[Yd`UbhYb Fci hYž'X]Y'ØVYf'GhfU»Vi f[ž'2ghYffY]Wkž'I b[Ufbž'?fcUh]Ybž G`ck Yb]Yb'i bX'*hU`]Yb'bUWk': fUb_fY]Wk'ZØ\fhY'"

8 Yf: `i ['nk]gWX Yb`UbXYhY]b '9``k Ub[Ybž'bUWX XYa 'X]Y i fgdfØb[`]WX [Yd`UbhY @UbXi b['Ui Z'XYa ': `i [d`Uhn'; fYX]b[gØX`]WX j cb 'B ØfbVYf['k YhhYfVYX]b[hii ba Ò[`]WX 'k Uf"'J cf'C fh `UbXYhYb 'g]Y 'a]h ZØbZ'A chcf!8 fUWX Ybž'UWX h'; mfc_cdhYfbž'ZØbZ I `hfU`Y]WX h\i VgWX fUi VYfb'i bX'nk Y] 'A chcfZi [nYi [Yb"'6Y[`Y]hYh k i fXYb'g]Y'j cb'j]Yf'J Yfgcf[i b[gZU\fnYi [Ybž'X]Y'ZØf'J YfdZY[i b[i bX'HfUbgdcfh'gcf[hYb"'8 Yf'GY[Y`Zi [d`Uhn'9``k Ub[Yb']gh'ZØf GY[Y`Zi [nYi [Yž'A chcfgY[`Yfž'I `hfU`Y]WX hZi [nYi [Y'i bX A chcfZi [nYi [Y'V]g'ni 'Y]bYa '< ÒWX ghUVZi [[Yk]WX h'j cb'nk Y] HcbbYb'ni [Y`UggYbž'k Ug'X]Y'@UbXi b['Xcfh'a Ò[`]WX 'a UWX hY'"

; UghZfYi bXgW\UZh`]b '9``k Ub[Yb

 $8\,]Y\,:\,\,`]Y\,[\,\,Yf[\,\,fi\,\,dd\,Y\,\,'9\,\,\check{}\,`k\,\,Ub\,[\,\,Yb\,\,\check{}\,\,\,V\,\,UhhY\,\,'Z\!\!\varnothing f\,\,'X\,]Y\,\,'Z\!fUb\,n\,\grave{O}g]gW\!\lambda\,Yb\,\,'D]\,\check{}\,`c\,hY\,b\,\,'D]$

Y]bY`\Yfn`]WXY; UghZfYi bXgWX UZh`cf[Ub]g]Yfh"`G]Y`i bhYfghØhnhYbX]Y`5b_i bZh`XYf`; ÀghY`i bX`gcf[hYb`ZØf`l bhYf_ØbZhYž`X]Y`]b`nk Y]; fi ddYb`Ui Z[YhY]`h`k i fXYb"`A Uf_i g`6YYf\U`hYfž`XYfghY``j YfhfYhYbXY`J cfg]hnYbXY`XYf`: `]Y[Yf[fi ddYž`VY[fØ» hY`X]YD]`chYbž`XUfi bhYf`XYb`; YgWXÀZhgZØ\fYf`XYf`: `i [gWXi `Y` 5]f`: `Ug\ ž\f]W@YZÄj fY"`Hfchn`gdfUWX`]WXYf`6Uff]YfYb`gWXi ZYb`X]Y5bk YgYbXYb`Y]bY`ZfYi bX`]WXYi bX`_Ua YfUXgWXUZh`]WXY5ha cgd\ÀfYž`i bX`XYf`5VYbX`k i fXY`]b`[YgY``][Yf`Fi bXYUV[YgWX`cggYb"

 $8]Y `[Y`ib[YbY`Cf[Ub]gUh]cb`XYf`:`]Y[Yf[fiddY`9``kUb[Yb`ZØf`XYb6YgiW\`\Uh`[fc*Yb`5b_`Ub[`[YZbXYb"`9]b`K]YXYfgY\Yb`XYfZfUbnÒg]gW\Yb`D]`chYb`]gh`VYfY]hg`ZØf`XUg`%$$!^\A\f][Y`\$\V]`\Aia`XYf:`]Y[Yf[fiddY`9``kUb[Yb`]a`\\\f`&$&,`[Yd`Ubh\z'kUg`UiZ'X]Ydcg]h]jY`6]`Ubn`X]YgYf`6Y[Y[bib[`\]bkY]gh"`5a`Zc`[YbXYbAcf[Yb`gYhnhY`X]Y'; fiddY`]\fYb':`i[`ZcfhibX`ghYiYfhY`Y]bYbD`Uhn`]b`XYf`B\A\Y'jcb`DUggUi`Ub"$

$8 Y 9bhk W_i b[XYf@iZhZU\fh]$

8]Y @ ZhZU\fhžY]b ZUgn]b]YfYbXYg: Y`Xž\Uhig]W\ gY]h]\fYb
5bZ\hat{b}[Yb]a '%, "'\lambda\f\i bXYfh'XfUa Uh]gW\ Ybhk]\w_Y`h"8YfYfghY
a chcf]g]YfhY: `i ['j cb'Cfj]``Y'i bX'K]`Vi f'K f][\hi]a '\lambda\f'%-\$' '[]`h
U`g'; YVi fhgghi bXY'XYf'a cXYfbYb'@ ZhZU\fh"<Yi hY'Yfa O[`]W\Yb
hYW\b]gW\Y: cfhgW\f]hhY']b 'XYb'6YfY]W\Yb'G]W\Yf\Y]hž'9ZZ]n]Ybn
i bX'I a k Y`hZfYi bX`]W_Y]h'Y]b 'VfY]hYfYg'GdY_hfi a 'Ub
FY]gYa O[`]W_Y]hYb"5i W\X]Y'8][]hU`]g]Yfi b['_ObbhY']b'Ni _i bZh
bYi Y'; YgW\AZhga cXY``Y'i bX'8]YbghY']b'XYf'@ ZhZU\fh
\Yfj cfVf]b[Yb"

K À\fYbX`X]Y`]bhYfbUh]cbU`Y`@ ZhZU\fh`Xi fWX

<Ui dhj Yf_Y\fg_bchYbdi b_hY`k]Y`: fUb_Zi fh`i bX`@cbXcb`[YdfÀ[h]ghž'V`Y]Vh`X]Y`; YgWX]WXhY`XYf`@ ZhZU\fh`Y]bY`k Yfhj c``Y`E i Y``Y`ZØf

9]bg]WXhYb`ØVYf`ni _ØbZh][Y`9bhk]W_`i b[Yb"`<YfUi gZcfXYfi b[Ybk]Y`I a k Y`hdfcV`Ya Y`a ØggYb`^YXcWX`k Y]hYf\]b`Ub[Y[Ub[Ybk]YfXYbži a `Y]bY`bUWX\U`h][Y`Ni _i bZh`XYf`@ ZhZU\fh`ni
[Yk À\f`Y]ghYb"

±g[YgUa h'nY][h'XUg'9fY][b]g']b'9``k Ub[Ybž'k]Y'Yb['X]Y
; Ya Y]bgWkUZh'XYf': `]Y[YbXYb']gh'i bX'k]Y']bhYfbUh]cbU`Y
6Yn]Y\i b[Yb'Xi fWk'gc`WkY'6Y[Y[bi b[Yb'[YghÀf_h'k YfXYb_ObbYb"'8Yf': `i ['XYf'5X`Yf'k]fX'kc\``bcWk'`Ub[Y']b'9f]bbYfi b[V`Y]VYb"

8 YhU]`g	
J c f ZU``	B c hZU``
I fgUWXY	gWX`YWXhY'K]hhYfib[
Cfh	: `i [d`Uhn'9fdZYbhU`ž'+' (+-'9``k Ub[Ybž
	8 Yi hgWX`Ub X
EiY``Yb	k k k "gWk UYV]gWkY!dcgh"XY
	k k k "g\\\\ k UYV]g\\\\ Y"XY
	k k k "ghUh]cb`]gh"XY

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