

GD² '? ÀfbhYb 'hfUi Yfh'i a 'DYhYf'?cghY`_U. 9]b 'J Yf`i gh'ZØf'X]Y 'Dc`]h]_

5a '%+"'5df]`&\$&) 'k i fXY XYf'HcX'j cb'DYhYf'?cghY`_U
VY_UbbhžY]bYa 'VYXYi hYbXYb'Gcn]U`XYa c_fUhYbžXYf']b'XYf
ÒghYffY]W\]gW\Yb'\b\bYb\dc`]h]_'\@VYf'\J\\fnY\bhY'\]bk Y['Y]bY
dfÀ[YbXYFc``Y'gd]Y`hY"'DYhYf'?U]gYfž'ghY``j YfhfYhYbXYf'GD²!
6i bXYgdUfhY]cVa Ubb'i bX'\@UbXYg\Ui dha Ubb'j cb'?ÀfbhYbž
Ài »YfhY'g]W\ 'VYgh\@fnh'\@VYf'XYb'JYf'i gh"'?cghY`_U'k\ÀfY'Ua
%"'AU]'+-'\J\\fY'U'h'[YkcfXYb'i bX'\Uhrg]W\ 'ghYhg'Z\@f
5b`]Y[Yb'XYf'AYbgW\Yb'Y]b[YgYhnhž'i bUV\\Ab[]['jcb']\fYf
dc`]h]gW\Yb'Ni[Y\\Of][_Y]h"'?U]gYf'VYgW\\fY]Vh'?cghY`_U'U`g
'U\\fnY\\bhY`Ub[Yb':fYi bX'i bX'[YgW\\AhnhYb'FUh[YVYfžXYf
jYfgW\]YXYbY'dc`]h]gW\Y'\YahYf']bbY\\UhhY"'8Uni 'n\A\`Yb
i bhYf'UbXYfYa 'GhUUhggY_fYh\Afz'`Ub['\A\\f][Yf'5V[YcfXbYhYf
ni a 'BUh]cbU`fUhž'Jc`_gUbk U`h'i bX'ni `Yhnh'Ui W\ 'CVa Ubb
XYg'DYbg]cb]ghYbj YfVUbXYg'2 ghYffY]W\"'GY]b'9b[U[YaYbh
k Uf'[Ydf\A[h'i cb'Y]bYa'/Uad\\Y``]d/



5a '%+"'5df]`'&\$&) 'k i fXY'XYf'HcX'j cb'DYhYf'?cghY`_U'VY_Ubbhž Y]bYa 'VYXYi hYbXYb'Gcn]U`XYa c_fUhYbž'XYf']b'XYf ÒghYffY]WX]gWXYb' +bbYbdc`]h]_'ØVYf'+J\fnY\bhY'\]bk Y['Y]bY dfÀ[YbXY'Fc``Y'qd]Y`hY'''DYhYf'?U]qYfž'qhY``j YfhfYhYbXYf'GD²! 6i bXYgdUfhY]cVa Ubb'i bX'@UbXYg\Ui dha Ubb'j cb'? ÀfbhYbž Ài » YfhY'g]WX'VYghØfnh'ØVYf'XYb'J Yf'i gh''? cghY`_U'k ÀfY'Ua '%''A U] +- '\lambda\fY'U'h'[Yk cfXYb'i bX'\Uh'g]WX'ghYhg'ZØf'5b`]Y[Yb'XYf A YbgWXYb'Y]b[YgYhnhž'i bUV\Àb[]['j cb']\fYf'dc`]h]gWXYb Ni [Y\Òf][_Y]h"

?U]gYf'VYgWXfY]Vh?cghY`_U'U`g''U\fnY\bhY`Ub[Yb': fYi bX'i bX [YgWX ÀhnhYb'F Uh[YVYfž'XYf'j YfgWX]YXYbY'dc`]h]gWXY'Ÿa hYf]bbY\UhhY"'8 Uni 'nÀ\`Yb'i bhYf'UbXYfYa 'GhUUhggY_fYhÀfž `Ub['À\f][Yf'5V[YcfXbYhYf'ni a 'B Uh]cbU`fUhž'J c`_gUbk U`h'i bX ni `Yhnh'Ui WX'CVa Ubb'XYg'DYbg]cb]ghYbj YfVUbXYg'² ghYffY]WX"GY]b'9b[U[Ya Ybh'k Uf'[YdfÀ[h'j cb'Y]bYa 'ghUf_Yb; YfYWXh][_Y]hgg]bb'i bX'Y]bYa 'i bYfa ØX`]WXYb'9]bgUhn'ZØf'Y]b [YfYWXhYg'² ghYffY]WX"

 $9]b J Y f i gh Z Ø f X] Y G c n] U X Y a c_f U h] Y i$

A]h DY hY f ?? cghY `_U j Yf `]Yfh X]Y 'Gcn]U `XYa c_fUh]gWX Y 'DUfhY]
 2 ghY ffY]WX g 'fGD² Ł'b]WX h bi f 'Y]bYb 'hfYi Yb 'Dc `]h]_Yfž 'gcbXYfb 'Ui WX Y]bYb 'Ui Zf]WX h][Yb 'Gcn]U `XYa c_fUhYb " ?? U]gYf 'V Yhcbhž 'X Ugg 'gY]b
 Hc X 'Y]bY '[fc > Y '@\vert W_Y ']b 'XYf '\oghY ffY]WX]gWX Yb 'Dc `]h]_ '\]bhY f `\one agh' \\ ? cghY`_U '\ k]fX '\Z\Off 'gY]bYb '\gUWX `]WX Yb \\Z\Ui g[`Y]WX Yb XYb '\Gh]` 'i bX
 gY]bY '\DhY [f]h\one h'[YgWX \one hhh" \Ni XYa '\YVh'? U]gYf'? cghY`_Ug
 A YbgWX `]WX_Y]h'i bX'; '\Ui Vk \Off X][_Y]h'\Yfj cf\one f\one 9][YbgWX \UZhYb\one z'X]Y
]\b'ni 'Y]bYa '\fYgdY_h]YfhYb' J YfhfYhYf'gY]bYf' \one DUfhY]'a \UWX \hYb''

?ifnY`K YfVYY]bV`YbXib[

 $8]Y GD^2 ``Uh'Y]bY ``Ub[Y 'HfUX]h]cb\check{z}'X]Y 'V]g'ni f'; fØbXi b[`XYfGcn]U`XYa c_fUh]gWX Yb '5fVY]hYfdUfhY]'fG8 5DŁ']a ``\J\\f'%, , -ni fØW_fY]WX h'''G]Y 'Yb hghUb XYb 'Ui g'XYf'ÒghYffY]WX]gWX Yb 5fVY]hYfVYk Y[i b[\check{z}'X]Y 'gY]h'%, *+'_\Aa dZhYž'i a `X]Y '6Y`Ub[Y 'XYf 5fVY]hYf'ni 'j YfhfYhYb'''? cghY`_U'k Uf'HY]``X]YgYf'Ub[YghUa a hYb 6Yk Y[i b['i bX'gYhnhY'g]WX 'ZØf'X]Y '9bhk]W_`i b['gcn]U`Yf'FYZcfa Yb Y]b\check{z}'X]Y 'Ui WX']b'XYf'BUWX_f]Y[gnY]h'i bhYf'XYf'GD² 'i a [YgYhnh k i fXYb''$

 $9]b.9fVY.Ub.A.YbgWX.]WX_Y]h.$

DY hY fg ?? cghY`_Ug 'Hc X 'k]fX 'U`g 'g W.a Yfn\UZh Ya d Z b X Y b 'i b X ']gh Y]b 'J Y f`i gh 'ZØf'j]Y 'Y ž 'X]Y 'g Y]b Y 'A Y b g W.`]w X_Y]h i b X 'g Y]b : Y]b [Y ZØ\``_Ub b h Y b " '? U]g Y f 'g d f] W. h i]b 'X] Y g Ya 'N i g Ua a Y b \ Ub [g Y]b 'h] Y Z Y g 'A]h [Y ZØ\``ZØf 'X] Y :: Ua]`]Y 'i b X '5 b [Y \ Of] [Y b 'X Y g J Y fg hc f V Y b Y b 'Ui g" '? cghY`_Ug 'K]f_Y b 'k]f X 'i b j Y f [Y gg Y b 'V 'Y] V Y b ž i b X 'g Y]b Y 'D f]b n]d]Y b 'k Y f X Y b ']b 'X Y f 'D c `]h]_ 'k Y]h Y f 'Y V Y b " 'A]h i]\ a [Y \ h Y]b Y 'D Y fg Ob`] W _Y]h ž X] Y 'g] W 'Y]X Y b g W UZh`] W 'ZØf 'X] Y A Y b g W \ Y]h Y]b g Y hn h Y i b X 'ZØf'; Y f Y W h][_Y]h '_Aa d Zh Y "

8]Y 'HfUi Yf'i a 'DYhYf'?cghY`_U'b]a a h']b'XYf'GD² 'VfY]hYb'F Ui a Y]b'i bX'j YfXYi h']W\hž'k]Y'k]W\h]['X]Y'K YfhY'XYf'DUfhY]'b]W\h'bi f ZØf']\fY'A]h[`]YXYfž'gcbXYfb'Ui W\'ZØf'X]Y'; YgY``gW\UZh'U`g'; UbnYg g]bX"'9f'k]fX'ghYhg'U`g'JcfV]`X']b'9f]bbYfi b['V`Y]VYbž'XUg'ZØf'XUg 9b[U[YaYbh']b'XYf'Gcn]U`XYac_fUh]Y'ghY\h"

 $\begin{array}{l} K Y]hYfY \stackrel{*}{\Rightarrow} Zcfa Uh]cbYb \stackrel{*}{Z}bXYb \stackrel{*}{G}]Y \stackrel{*}{U}i Z^{*}XYb \stackrel{*}{Z}c^{*}[YbXYb \stackrel{*}{G}Y]hYb. \\ \stackrel{*}{?} \stackrel{*}{\mid} W_{\underline{}} \stackrel{*}{?} \stackrel{\mathsf{A}fb}{} hYb \overset{*}{z} \stackrel{\mathsf{C}}{} HG\overset{*}{z} \stackrel{\mathsf{i}}{} bX^{*}K]_{\underline{}\underline{}}]dYX]U" \end{array}$

Cfh'XYg'; YgW\Y\Ybg8YhU]`g'ni f'A Y`Xi b[K Ug']gh dUgg]Yfh3HcX; YbUi Yf'Cfh'VY_Ubbh3?ÀfbhYbž'² ghYffY]W\6YghY FYZYfYbn_`]W_!_UYfbhYb"UhK Y]hYfY'Ei Y``Ybchg"Uh

Gci fWY. X]Y!bUWX f]WX hYb"Uh

8 Y hU]`q

6Yqi WXYb G]Y i bq Ui Z b!U["XY