>UW_gcbj]``Y A Ub '5ffYghYX 'Zcf'Cb`]bY H\fYUhg'5[U]bgh'=79'DfchYghYfg

5 *\underset \underset gcbj]\``Y`a Ub`k Ug`UffYghYX`Zcf`]ggi]b[`U`gcW]U\`a YX]U h\fYUh`U[U]bgh`dfchYghYfg`Ua]X`bUh]cbk]XY`Ubh]! =7 9

XYa cbghfUh]cbg"



JW_gcbj]``Yž'8ij U``7ci bhmž': `cf]XUž'I G5 !' + U'gi fdf]g]b[
hi fb cZ'Yj Ybhgž'Ubh]! = 79 dfchYghg Yfi dhYX'UWfcgg'a i `h]d`Y'W]h]Yg']b
h\Y'I b]hYX'GhUhYgž'Ub'i df]g]b['h\Uh'gdYU_g'j c`i a Yg'UVci h'h\Y
\Y][\hYbYX'hYbg]cbg'gi ffci bX]b[']a a][fUh]cb'YbZcfWYa Ybh''
H\YgY'XYa cbghfUh]cbg'd]j chYX'Ufci bX'h\Y'fYWYbh'ZYXYfU`'UWh]cbg
U[U]bgh']a a][fUbhg'UbX'Zci bX'UXX]h]cbU`'WcbhYI h']b'U'`cWU`
: `cf]XU']bW]XYbh'h\Uh'\Ug'g]bW''WUdhi fYX'a YX]U'UhhYbh]cb"

Cb' is bY' '% 'z' & \$ &) z' `Uk 'Yb ZcfW' a Ybh']b' is JW_gcbj] ``Y' UffYghYX & *!mY Uf!c`X' NUW Ufm' 8 Y[fcgg' UZhYf' \ Y' a UXY' U' W]``]b['h\fY Uh'cbgcW]U` a YX]U"' < Y' U``Y[YX`m' VcUghY X' UVci h'fi bb]b['cj YfdfchYghYfg' k]h\' U'hck 'hfi W_z' dfcadh]b['h\Y's JW_gcbj]``Y' G\Yf]ZZ g C ZZ]WY'hc'hU_Y']aa YX]UhY' UWh]cb"' H\Y'dc`]WY' fYWY]j YX' U'h]d' UVci h

h\Y`Wca a Ybhg`UbX`]XYbh]Z]YX`8Y[fcgg`ig]b[`h\Y]f`\dhY``][YbW\Ib]hži`h]a UhY`m`W\Uf[]b[`\]a 'k]h\`U`gYWcbX!XY[fYY`ZY`cbm`Zcfkf]hhYb`h\fYUhg`hc`WcbXi Wh`Ub`UWh`cZ`hYffcf]ga "`5g`fYdcfhYX`Vm`_gcbj]``Y`\\cappaca ž`\Y`fYa U]bYX`]b`W`ghcXm`Uh`8ij U``7cibhm`^U]`Ug`cZ'h\Y`YjYb]b[`Zc``ck]b[`\]g`UffYgh"

DfchYghg $5 \text{ Wfcgg h} \setminus Y \cdot B \cdot Uh]cb$

H\Y'dfchYgh'[fYk 'fcVi gh'Ug'h\Y'XUm'k Ybh'cbž'gk Y``]b['hc'Uh'`YUgh) \$\$ 'XYa cbghfUhcfgž'a Ubm'k Uj]b['A YI]WUb'ZU[g'UbX'W\UbhYX'dfc!]a a][fUbh'g`c[Ubg"'Hi]'8 Ug\Uf_ž'U'Wca a i b]hm'`YUXYfž YbWci fU[YX'dYUWYZI `'fYg]ghUbW''UbX'bcb!j]c`YbW''Ua cb['h\Y dfchYghYfg"'<ck Yj Yfž'h\Y'Uha cgd\YfY'ei]W_`m'YgWU`UhYX'k \Yb `Uk 'YbZcfW'a Ybh'i h]`]nYX'dYddYf'VU``gž'ZUg\!VUb['[fYbUXYgž'UbX hYUf'[Ug'hc'X]gdYfgY'h\Y'Wfck Xž'ZI fh\Yf']bZUa]b['h\Y'g]hi Uh]cb" K\]`Y'gca Y'dfchYghYfg'gi ZZYfYX']b'i f]Yg'Zfca 'fi VVYf'Vi ``Yhgž'h\Y Wc``YWh]j Y'gd]f]h'fYa U]bYX'i bVfc_Ybž'UbX'U'gYbgY'cZ'\i a cf dfYj U]`YX'Ua]Xgh'h\Y'W\Ucg"

6fcUXYf7cbhYlhUbX =a d`]WUh]cbg

 $H\Y'i\ bfYgh']b'Gci\ h\Yfb'7U`]Zcfb]U'fYZYWhg'U'VfcUXYf'k\ Uj\ Y'cZ \\]bX][\ bUh]cb'fYgi `h]b[\ 'Zfca 'ZYXYfU`']a\ a\][\ fUh]cb'fU]Xgž'bchUV`m \\ h\cgY'h\Uh'VY[\ Ub'YUf`]Yf']b'h\Y'a\ cbh\"'<math>{\bf 567}$ 'BYk\ g'ci\ h`]bYg'U \\ h]a\ Y`]bY'cZ'h\YgY'Yj\Ybhgž']bX]WUh]b['h\Uh'h\Y'dfchYghg'VY[\Ub'cb\ \rightarrow bY'* 'UZhYf'=79'U[\Ybhg'WUff]YX'ci\ h']a\ a\][\ fUh]cb'gk\ YYdgž']bW]h]b[\ ZYUf'UbX'Ub[\Yf']b'a\ Ubm'a\][\ fUbh'Wca\ a\ i\ b]h]Yg'''DfYg]XYbh'Hfi\ a\ d\ g

fYgdcbgY`hc`h\Y`i bfYgh`\Ug`]bWi XYX`h\Y`i bdfYWYXYbhYX XYd`cma Ybh`cZ`h\Y`BUh]cbU``; i UfX`UbX`A Uf]bYg`hc`@cg 5b[Y`Yg Ub`UWh]cb`a Yh`k]h\`Wf]h]W]ga 'Zfca '`cWU```YUXYfg`k\c`gYY]h`Ug`Ub`UVi gY`cZ`dck Yf"

5g'h\Y'g]hi Uh]cb'i bZc`Xgž'h\Y']a d`]WUh]cbg'cZ'h\YgY'dfchYghg'UfY dfcZci bX"'H\Ym'YbWUdgi `UhY'U'[fck]b['VUW_`Ug\'U[U]bgh dYfWY]j YX']b'i gh]WYg'ZUWYX'Vm']a a][fUbh'dcdi `Uh]cbg'i bXYf'h\Y W ffYbh'UXa]b]ghfUh]cb"'K \]`Y'gca Y'gYY_'hc'Yl dfYgg'h\Y]f'f][\hg h\fci [\'dYUWYZi ``UggYa V`mž'ch\Yfg'UfY'fYa]bXYX'h\Uh h\fYUhg `]_Y'h\cgY'a UXY'Vm'8Y[fcgg k]``bch'[c'k]h\ci h WcbgYei YbWY"'H\Y'\Ugcbj]`Y'G\Yf]ZZ g'C ZZ]WY'\Ug'fY]hYfUhYX'h\Uh cb`]bY'h\fYUhg'UfY'hU_Yb'gYf]ci g`mž'YW\c]b['U'WU``Zcf'j][]`UbWY']b dfchYWh]b['Wca a i b]hm'gUZYhm'

5g'k Y'Wcbh]bi Y'hc'cVgYfj Y'h\YgY'Wf]h]WU`XYj Y`cda Ybhgž'cbYh\]b[']g'WYUf.'Zfca '_gcbj]``Y'hc'GUbhU'5bU'UbX'VYmcbXž Wca a i b]h]Yg'UfY'ghUbX]b['i dž'fU``m]b['h\Y]f'j c]WYg'U[U]bgh UWh]cbg'h\Ym'XYYa 'i b'\fantagh''H\Y'ci hWca Y'cZ'h\YgY'dfchYghg'a][\h'\fantagh'g\UdY'h\Y'Zi hi fY'cZ']a a][fUh]cb'dc`]Wm'UbX'Wca a i b]hm fY`Uh]cbg\]dg'UWfcgg'h\Y'Wci bhfm'

8 YhU]`g	
Cfh	划W_gcbj]``Yž'8ijU`'7cibhmž': `cf]XUž'IG5
EiY``Yb	k k k "'\u\u\u\u\u\gcbj \]\``Y\\u\u\u\a
	• k k k "`Uh]a Yg"Wca
	• UVWbYkg"[c"Wca

6 Ygi W Yb 'G]Y i bg 'Ui Z 'a Y]b!k]Yb "bYh