GYW f]b['Cif': i hi fY.'7cb[fYgg'HUW_`Yg GUZYhm'Uh'A U^cf'9j Ybhg°

A]Ua]!8UXY'7ci bhm'G\Yf]ZZFcg]Y'7cfXYfc!Ghi hn'hYgh]Z]Yg']b 7cb[fYgg'cb'a Ugg'[Uh\Yf]b['gYW'f]hm'Ua]X'f]g]b['h\fYUhg UbX'i dWca]b['Yj Ybhg"



'%\$ '7 Ub b c b '< ci gY 'C ZZ] WY '6i] `X] b [ž 'K Ug\] b [hc b ž '8 "7 "ž I b] hY X 'GhUhY g '! 'C b '\(\alpha\) \maxstar \maxstar

5a cb['h\Y'k]hbYggYg'dfYgYbh'k YfY'dfca]bYbh'Z][i fYg']b'`Uk
YbZcfWa Ybhz'gi W\'Ug'A]Ua]!8UXY'7ci bhm'G\Yf]ZZ'Fcg]Y'7cfXYfc!
Ghi hn'UbX'fYh]fYX'6cghcb'Dc`]WY'8YdUfha Ybh'7ca a]gg]cbYf'9X
8Uj]g"'H\Ym'Vfci [\h'Z]fgh\UbX'_bck `YX[Y'cZ'gYW'f]hm'W\U``Yb[Yg
ZUWYX'Xi f]b['a Ugg'[Uh\Yf]b[g"'H\Y'di V`]WUbX'dfYgg'k YfY']bj]hYX
hc'dUfh]W]dUhYž'\][\`][\h]b['h\Y'hfUbgdUfYbh'UddfcUW\'h\Y'HUg_
: cfWY'U]a g'hc'hU_Y']b'UXXfYgg]b['h\YgY'dfYgg]b['WcbWYfbg"'H\Y
gYgg]cb'k Ug'U`gc'`]j YghfYUa YX'cb'Mci Hi VYž'a U_]b[']h'UWWYgg]V`Y
hc'U'k]XYf'Ui X]YbW'"

$<][\ \][\ \][\ \][\ \][\ \][\ \ \][\ \ \][[\ \ \][][\ \ \][\ \][\ \][\ \ \][\ \ \][\ \ \][\ \ \][\ \ \][\ \ \][\ \ \]$

BYk =b]h]Uh]j Yg Zcf 9b\UbWX GYW f]hm

⇒ 'hUbXYa 'k]h\ 'A W7 Ui `g'YZZcfhgž'FYdfYgYbhUh]j Y'8 U`Y'K "'Ghfcb[fb@\$) Ł'fYWYbh`m'W\U]fYX'Ubch\Yf'd]j chU`'\YUf]b['ZcW'gYX'cb A Ugg'; Uh\Yf]b['9j Ybhg. '5ggYgg]b['GYW'f]hm'7ccfX]bUh]cb'UbX DfYdUfYXbYgg" 'Ghfcb['Ya d\Ug]nYX'h\Y']a dcfhUbW'cZ'gc`]X

 $\label{thm:converse} WccdYfUh]cb~VYhk~YYb~cWU~z~ghUhY~z~Ub~X~ZYXYfU~~`Uk~Yb~ZcfWa~Ybh~Ug~h\Ym~[~YUf~i~d~Zcf~a~U~cf~]b~hYfb~Uh]cb~U~~gd~cfh]b~[~Yj~Yb~hg~gi~Wk~Ug~h\Y~&$&)~:~~ <math>\pm 5.7~i~V~K~cf~X~7i~d~''~<Y~~[~V~][~V~][~N~X~h~Uh~gi~WW~gg~Zi~~`a~Ub~U[~Ya~Yb~h~c~Z~h~YgY~a~Ugg~[~Uh~Yf]b~[~g~fY~]Yg~V~Uj~]~m~cb~h~cfci~[~V~d~Ub~b]b~[~Ub~X~WccfX]b~Uh]cb~Ua~cb~[~j~Uf]ci~g~Yb~h]h]Yg~$

7cbZfcbh]b['6fcUXYf'7cbWYfbg

K \]'Y'W' fV]b['d\mg]WU`'h\fYUhg']g'j]hU`ž'h\Y'\YUf]b[g'U`gc
UXXfYggYX'h\Y'XUf_Yf'g]XY'cZ'`Uf[Y'[Uh\Yf]b[g.'h\Y'dchYbh]U`'Zcf
\ia Ub'hfUZZ]W_]b["'K]h\'gi W\'Yj Ybhg'UhhfUWh]b['bi a Yfci g
j]g]hcfgž'Wf]a]bU`'bYhk cf_g'a Um'gYY_'hc'Yld`c]h'h\Y'g]hi Uh]cb"
7cb[fYgg'\Ug'fYW'bh`m'dUggYX'UXX]h]cbU`'Zi bX]b['hc'Wci bhYfUWh
h\YgY'f]g_gž'YgdYW]U``m'WcbW'fb]b['`Uf[Y'i dWca]b['Yj Ybhg"

#D'``][\h'cZ'h\YgY'X]gWigg]cbgž'Vch\'A W7Ui```UbX'Ghfcb['`UfYfYZYWh]b['`U'dfcUWh]jY'ghUbWi'cb'Ybgif]b['gUZYhm'Zcf'W]h]nYbg'UbXj]g]hcfg'U`]_Y"'5g'h\Ym'Wcbh]biY'hc'XY`]VYfUhY'UbX'WccfX]bUhYž'cbYh\]b[']g'WYfhU]b.'h\Y'gUZYhm'cZ'WfckXg'Uh'a Ugg'[Uh\Yf]b[gfYei]fYg'Ub'cb[c]b['Wcaa]haYbh'hc'j][]`UbWY'UbX'Wc``UVcfUh]cbUWfcgg'U```YjY`g'cZ'[cjYfbaYbh"

cf'a cfY'XYhU]`g'UVci h'h\Y'\YUf]b['UbX'cb[c]b['YZZcfhg'ZcfbUh]cbU`'gUZYhmž'W\YW_'ci h'h\Y'Zi ```fYdcfhg'Zfca 'h\Y'7ca a]hhYY

 $cb' < ca Y`UbX'GYW'f]hm\check{z}'7cb[fYgga Ub'A]WXUY``A W7Ui`\check{z}'UbX'FYdfYgYbhUh]jY'8U`Y'K"'Ghfcb[" \\$

| 8 Y hU]`g | |
|-----------|---|
| Cfh | ' %\$ 7 Ubbcb < ci gY C ZZ]WY 6i]`X]b[ž |
| | K Ug\]b[hcbž8"7"ž1 b]hYX'GhUhYg |
| EiY``Yb | • \ca Y`UbX"\ci gY"[cj |
| | • a WWUi `"\ci gY"[cj |
| | • ghfcb["\cigY"[cj |

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'a Y]b!k]Yb "b Yh