

9I d`cfY': fUb_`]b'7ci bhm/ $\$ \$' - /g'A Um'&\$'WY`YVfUh]cbg \cbcf]b['Ya UbW]dUh]cbž'ZYUhi f]b['W' `hi fU`'Yj Ybhg'UbX \]ghcf]\\\ \frac{1}{2} \frac



HU``U\UggYYž: `cf]XUžI G5 ! '5g'A Um'XfUk g'hc'U'WcgYž: `cf]XU\UgfYW\bh`m'hi fbYX']hg'ZcW g'cb'U'g][b]Z]WUbh'XUhY']b']hg'\]ghcfmž cbY'h\Uh'bch'Yj YfmcbY']g'Uk UfY'cZ'Vi h'XYgYfj Yg'hc'VY'WY'YVfUhYX"H\Y'XUhY']b'ei Ygh]cb']g'A Um'&\$ž'%, *) ž'k\Yb'Ybg`Uj YX'6`UW_]bX]j]Xi U`g']b': `cf]XU'Z]fgh'`YUfbYX'cZ'h\Y]f'Ya UbW]dUh]cbž'Ua ca Ybhci g'cWWUg]cb'h\Uh'a Uf_YX'h\Y'YbX'cZ'VcbXU[Y"'H\]gmYUfž'Xck bhck b'HU``U\UggYY'Vi nnYX'k]h\'`]ZY'Ug'`cWU`g'[Uh\YfYX Zcf'U'fYYbUWha Ybh'Wca a Ya cfUh]b['9a UbW]dUh]cb'UbX': fYYXca 8 Umg'cb'A Um'&\$ž'Ub'Yj Ybh'XYX]WUhYX'hc'fU]g]b['Uk UfYbYgg'cZ'h\]g\]ghcf]WXUm'

<ck Yj Yfža Ubm: `cf]X]Ubg'UfY'gh]```]b'h\Y'XUf_'UVci h'h\Y
]a dcfhUbW'cZA Um'&\$":: cf'h\Y'dUgh'h\fY'XYWUXYgž'U'XYX]WUhYX
[fci d'cZ'6`UW_'\]ghcf]Ubg fYZYffYX'hc'Ug'h\Y' W'`hi fY
_YYdYfg \Ug'h]fY'Ygg`m'k cf_YX'hc'g\YX'`][\hicb'h\]g
i bXYfUddfYW]UhYX'\]ghcf]WU`'Yj Ybh"'H\]g'mYUfž'h\Y'&\$h\'cZA Um
7i `hi fY'?YYdYfg'cZBcfh\:: `cf]XU'\Y`X'U'gdYW]U``Uk UfXg
WYfYa cbmž'\cbcf]b['hk Y'j Y']bX]j]Xi U'g'UbX'Zci f'cf[Ub]nUh]cbg
k\c'\Uj Y'a UXY'g][b]Z]WUbh'Wcbhf]Vi h]cbg'hc'dfYgYfj]b['h\Y
hfUX]h]cbg'h]YX'hc'h\]g']a dcfhUbh'XUm"'5a cb['h\Y'\cbcfYYg'k Ug
8f"'; Ycf[Y'K Ug\]b[hcb'D]hha Ub'Gf"ž'U[YX'-, ž'fYWc[b]nYX'Zcf'\]g
cj Yf'*\$'mYUfg'cZ'Wca a]ha Ybh'hc'YXi WUh]cb'UbX'W'`hi fU`
Uk UfYbYggž'dUfh]W'`Uf`m']b'*J\W_gcb'UbX'*YZZYfgcb'Wci bh]Yg"
@]_Yk]gYž'-%mYUf!c'X'j YhYfUb'UbX'hYUWXYf'\\
@]_Yk]gYž'-%mYUf!c'X'j YhYfUb'UbX'hYUWXYf'\\
@]_Yk]gYz'-%mYUf!c'X'j YhYfUb'UbX'hYUWXYf'\\
@]_Yk]ghcfm'UbX'W'`hi fU`
hfUX]h]cbg'hc'ghi XYbha"</pre>

7ci bhm 7Y YVfUh]cbg UbX: i hi fY 9j Ybhg

H\]g`mYUfž`ZYgh]j]h]Yg`\cbcf]b['A Um`&\$ 'gdUbbYX 'gYj Yb 'Wci bh]Ygž ZYUhi f]b['U'g`Yk 'cZ'Yj Ybhg`]bWi X]b['dUfUXYgž'[i Ygh'gdYU_Yfgž UbX'Wi 'hi fU`'UWh]j]h]Yg": fUb_`]b'7ci bhm'dUfh]Wi `Uf`m'ghccX'ci hž Wca a Ya cfUh]b['h\Y'XUm'Uh'h\Y'\]ghcf]WBY[fc': cfhž'k \YfY XYgWYbXUbhg'cZ: fYY'6`UW_'dYcd`Y'UbX'\DX][Ybci g'[fci dg [Uh\YfYX'hc'WY`YVfUhY'h\Y]f'g\UfYX'\Yf]hU[Y"'\DX'X K U_i ``U'7ci bhmž cf[Ub]nYfg'WYj Yf`m'WcbbYWhYX'h\Y]f'A Um'&\$ 'WY`YVfUh]cbg'hc'h\Y i dWca]b['\Rightarrow bYhYYbh\'Yj Ybhgž'Ybgi f]b['h\Uh'h\Y'Wca a i b]hm g gd]f]h'cZ'ZfYYXca 'UbX'\]ghcfm'Wcbh]bi Yg'h\fci [\'\Rightarrow bY"

\$\text{bYhYYbh\"]hgY\Z\text{z\warmanyVfUhYX\"cb\"\\ bY\\\\\-\text{z\c\xg\"U\j\]hU\\\\\\]bh\\Y\\cb\[c\]b\[\text{b\mathbf{U}\warmany\"\text{U\mathbf{U}\warmany\"\text{b\mathbf{U}\warman

; fck]b[FYWc[b]h]cb

 $\label{eq:continuous} 7Y`YVfUh]cbg`cZ' > bYhYYbh\`hmd]WU``m`]bWi XY`ZUa]`m`[Uh\Yf]b[gžd]Wb]Wgž`UbX`W``hi fU``Yj Ybhg`\cbcf]b[`5Zf]WUb`5a Yf]WUb`\Yf]hU[Y"H\Y`\c`]XUmg`dcdi`Uf]hm`gi f[YX`UZhYf`VYWca]b[`U`ZYXYfU``\c`]XUm]b`&$&%ž`h\Ub_g`hc`UXj cWUWm`Zfca `Z][i fYg``]_Y`CdU``@YYž`_bck bUZYWh]cbUhY`m`Ug`h\Y`; fUbXa ch\Yf`cZ' > bYhYYbh\" `H\]gYIdUbX]b[`fYWc[b]h]cb`\Ug`U`gc`YbWci fU[YX``cWU`gž']bWi X]b[mci b[`Ui h\cfg``]_Y`%(!mYUf!c`X`JUbUY`&Ja Yg!6Ymž`hc`g\UfY`h\Y]fdYfgdYWh]j Yg`cb`6`UW_`UbX`&X][Ybci g`\Yf]hU[Y`Xi f]b[`h\YgYYjYbhg"$

H\fci [\'h\Y'cb[c]b['YZZcfhg'cZ'Wca a i b]hm'a Ya VYfg'UbX'h\Y]b]h]Uh]j Yg'Xf]j Yb'Vm'W' `hi fY'_YYdYfgž'h\Y'Uk UfYbYgg'cZ'Vch\'A Um &\$'UbX'\[idot\[idot\] bYhYYbh\'\Ug'[fck b"'H\Y'GhUhY'@]VfUfm'cZ': `cf]XU'\Ug\\][\`][\hYX'fYgci fW'g'Zcf'9a UbW]dUh]cb'8Um'W'`YVfUh]cbgž\Ya d\Ug]n]b['\ck 'j]hU`']h']g'hc'_YYd'h\YgY'\]ghcf]WU`'`Yggcbg'U`]j Y"Cb`]bY'fYgci fW'g'UbX'V]V`]c[fUd\]Yg'cb'h\Y'9a UbW]dUh]cbDfcWUa Uh]cb'Wcbhf]Vi hY'hc'h\]g'YXi WUh]cbU`'YZZcfhž'a U_]b[']hYUg]Yf'Zcf'UbmcbY']b': `cf]XU'hc''YUfb'UVci h'h\]g'd]j chU`'dYf]cX"

5g'k Y'UddfcUW\'\id bYhYYbh\\ž'h\Y'gd]f]h'cZ'i b]hm'UbX'W\'YVfUh]cb fYa U]bg'ghfcb['UWfcgg': `cf]XU"'9j Ybhg'`]_Y'h\cgY'cb'A Um'&\$'bch cb`m'YXi WUhY'Vi h'U`gc'fYgcbUhY'XYYd`m'k]h\'h\Y'cb[c]b['ei Ygh Zcf'Yei U`]hm'UbX''\langle gh]W\"'H\YfY g'gca Yh\]b['hc'VY'gU]X'Zcf fYa Ya VYf]b['k\YfY'kYjY'Wca Y'Zfca 'Ug'k Y'Zcf[Y'U\YUX']bhc h\Y'Zi hi fY"

8 Y hU]`g	
Cfh	HU``U\UggYYž: `cf]XUžI G5
EiY``Yb	• k k k "hU``U\UggYY"Wca
	• Xcg"Z`"[cj
	• k k k "Vf]hUbb]WU"Wca