G]`j Yf'5`Yfh'=ggi YX'Zcf'A]gg]b['A Uf]cb 7ci bhm'A Ub'k]h\'8Ya Ybh]U

A Uf]cb'7ci bhm'gYUfWXYg'Zcf'<ck UfX': YbbYfž'a]gg]b['g]bWV \$\delta \text{bY''%' \(\tilde{z} \) \(\tilde



: YbbYf'k Ug'fYdcfhYX'hc'VY'k YUf]b[''V'UW_'gk YUhdUbhgž'U'k \]hY UbX'`][\h'V'i Y'H!g\]fhž'UbX'U'BUj mj YhYfUb g'\Uh'Uh'h\Y'h]a Y'cZ'\]g X]gUddYUfUbW'''< Y'k Ug'Xf]j]b[''U'[c`X'&\$\$) 'HcmchU'7Ua fmž : `cf]XU'`]WYbgY'd`UhY' \Rightarrow @F +\$ž'k \]WX'k Ug'`Ugh'gdchYX'cb

±bhYfghUhY'%\$'bYUf'DYbgUWc`U"'H\Y'A Uf]cb'7ci bhm'G\Yf]ZZg'CZZ]WW
]bZcfa YX'h\Y'di V`]Wh\Uh': YbbYf'gi ZZYfg'Zfca 'XYa Ybh]Už
]bWfYUg]b['h\Y'i f[YbWm'cZ'h\Y'gYUfW\"'G\ci `X'UbmcbY'\Uj Y
]bZcfa Uh]cb'fY[UfX]b['\]g'k\YfYUVci hgž'h\Ym'UfY'i f[YX'hc'WU``
- %%"

'7ca a i b]hm'F YgdcbgY 'UbX'h\Y'G]`j Yf'5`Yfh GmghYa

H\Y'G]'j Yf'5`Yfh'dfc[fUa 'd`Umg'U'Wf]h]WU`fc`Y']b'dfchYWh]b['gYb]cfg`]_Y': YbbYf"'H\]g']b]h]Uh]j Yž'g]a]`Uf'hc'5a VYf'5`Yfhgž']g'XYg][bYX gdYW]Z]WU`m'Zcf'`cWUh]b['gYb]cfg'k]h\'Wc[b]h]j Y']a dU]fa Ybhgž'gi W\Ug'XYa Ybh]U'cf'5`n\Y]a Yf g'X]gYUgY"'FYdcfhg'Zfca 'A cfUXU GYb]cf'@jj]b['YId`U]b'h\Uh'k\Yb'U'G]`j Yf'5`Yfh']g'UWh]j UhYXž'`cWU`Uk 'YbZcfWa Ybh'k cf_g'hc[Yh\Yf'k]h\'a YX]U'ci h'Yhg'UbX Wca a i b]hm'U`Yfh'gmghYa g'hc'gdfYUX'h\Y'k cfX'UVci h'U'a]gg]b[gYb]cf"

5ddfcl]a UhY`m'%\$i `cZc`XYf'UXi `hg'\Uj Y`XYa Ybh]Už'\][\`][\h]b[h\Y']a dcfhUbW'cZ'dfchYWh]j Y`a YUgi fYg'Zcf'h\]g'j i `bYfUV`Y dcdi `Uh]cb"'H\Y'G]`j Yf'5`Yfh'dfchcWc`']bWi XYg'XYhU]`YX XYgWf]dh]cbg'cZ'h\Y`a]gg]b['gYb]cf'UbX'h\Y]f'`Ugh'_bck b'`cWUh]cbgž Ug'k Y```Ug'Ubm'fY`Yj Ubh'\YU`h\`cf'VY\Uj]cfU``WcbW'fbg"'H]a Y gYbg]h]j]hm']g'_Ymž'UbX'U`Yfhg'UfY']ggi YX'k \Yb'cZZ]W]U`g'WcbZ]fa h\Uh'U'gYb]cf'a Um'VY'Uh'g][b]Z]WUbh'f]g_"

'5 FYWbh'7UgY. FcbU`X '5fh\if'GW\cf

 $\Rightarrow gh'fYW'bh'mz'h'Y'AUf]cb'7cibhm'G'Yf]ZZg'CZZJWW'kUg']bjc'jYX']bUbch'Yf'G]'jYf'5'Yfh'Zcf'U'++!mYUf!c'X'fYg]XYbhz'FcbU'X'5fh'ifGW'cfz'k'c'kUg''cWUhYX'gUZY'UZhYf'ZU]']b['hc'UhhYbX'U'aYX]WU'Uddc]bhaYbh''GW'cf'kYbh'a]gg]b['UZhYf''YUj]b[''\]g'\caY'cb'AUm, z'gdUf_]b['WcbWYfb'Zfca'ZUa]'m'UbX''Uk'YbZcfWYaYbh'U']_Y''@]_Y:YbbYfz'GW'cf'giZZYfg'Zfca'XYaYbh]Uz'aU_]b[''\]g'WUgY'Ubch'YffYa]bXYf'cZ'h'Y'f]g_g'ZUWYX'Vm'gYb]cfg'k]h''Wc[b]h]jY]adU]faYbhg''$

GW.cfk Ug``Ugh'gYYb'k YUf]b['ZUXYX'V`i Y'YUbg'UbX'U'Vi hhcb!i d [fUm'g\]fh'UbX'ghUbXg'Uh'* & 'hU``ž'k Y][\]b['%-\$'dci bXg"'H\YgY XYhU]`gž'U`cb[g]XY'fY[i `Uf'Wca a i b]WUh]cb'Zfca 'h\Y'G\Yf]ZZ g cZZ]WYž'\Y`dYX'Ybgi fY'\]g'ei]W_'fYhi fb'\ca Y"'5bYWXchYg'cZ'h\]g bUhi fY'\][\`][\h'h\Y'dfYgg]b['bYYX'Zcf'Wca a i b]hm'Uk UfYbYgg UbX'dfcUWh]j Y'a YUqi fYg'WcbWYfb]b['qYb]cfg'k \ca Um'k UbXYf"

9b\UbW]b[7ca a i b]hm GUZYhm

6YmcbX'G]`j Yf'5`Yfhgž'h\YfY'UfY'ch\Yf']b]h]Uh]j Yg'h\Uh'k cf_'hc gUZY[i UfX'gYb]cfg'k]h\'Wc[b]h]j Y']a dU]fa Ybhg"'Dfc[fUa g ZcW'g]b['cb'XYa Ybh]U'gUZYhmž'k UbXYf]b['dfYj Ybh]cb'a YUgi fYgž UbX'Yj Yb'gdYW]U`]nYX'a Ya cfm'WUfY'Wca a i b]h]Yg'\Uj Y'VY[i b'hc gdf]b['i d"'Gi W\'ZUW]`]h]Yg'dfcj]XY'gYW' fY'UfYUg'UbX'hfU]bYX'ghUZZ hc'a YYh'h\Y'bYYXg'cZ'h\cgY'k\c'a Um'ghfi [[`Y'k]h\'X]gcf]YbhUh]cb cf'WcbZi g]cb"

A cfYcj Yfžgca Y'Wca a i b]h]Yg'UfY'UXcdh]b[']bbcj Uh]j Y hYWxbc`c[]Yg'`]_Y'; DG'hfUW_]b['XYj]WYg'hc'Ybgi fY'h\Y'gUZYhm'cZ fYg]XYbhg'k]h\'Wc[b]h]j Y'WcbX]h]cbg"'5g'Wca a i b]hm'a Ya VYfgž'k Y a i gh'fYa U]b'j][]`Ubh'UbX'dUfh]W]dUhY']b'gYb]cf'gUZYhm']b]h]Uh]j Yg" FYgci fWYg'UfY'Uj U]`UV`Y'Zcf'ZUa]`]Yg'UbX'WUfY[]j Yfg'hc'\Y`d fYWc[b]nY'YUf`m'g][bg'cZ'k UbXYf]b['h\Uh'Wci `X'`YUX'hc'XUb[Yfci g g]hi Uh]cbg"

5g'h\Y'gYUfW\'Zcf'<ck UfX': YbbYf'Wcbh]bi Ygž'fYg]XYbhg'cZ'A Uf]cb 7ci bhm'UfY'fYa]bXYX'cZ'h\Y'Wf]h]WU`'fc`Y'h\Ym'd`Um']b'gi ddcfh]b[UbX'dfchYWh]b['h\Y]f'c`XYf'bY][\Vcfg"'H\Y'G]`j Yf'5`Yfh'dfc[fUa gYfj Yg'bch''i gh'Ug'U'fYgdcbgY'a YW\Ub]ga /']h']g'U'Wca a]ha Ybh'hc Ybgi f]b['h\Uh'Yj Yfm'gYb]cf']g'gUZY[i UfXYX'UbX'h\Uh'Wca a i b]hm a Ya VYfg'ghUbX'fYUXm'hc'Ugq]gh']b'h][\h'g]hi Uh]cbg"

8 YhU]`g	
Cfh) &\$\$^GK_^%+*h\^5j_Ybi_Yž^8i_bbY``cbž': `cf]XUž_
	I G5
EiY``Yb	• k k k "₩]₩_cf`UbXc"₩ca

8 Y hU]`g	
	• k k k "cWU`U!bYk g"Wca
	a cfUXUgYb]cf`]j]b["Wca

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