9| d`cfY`h\Y`hfU[]WWJgY`cZ`GYUh\`>JW_gcbž`U`%) !mYUf!c`X a i fXYfYX`]b`&\$%%ž`UbX`]hg`]a dUWh`cb`mci h\`j]c`YbWY`UbX î gh]WY`]b`: `cf]XU"



Gi a a YfZ]Y`Xž: `cf]XUž'I G5 '!'H\Y'hfU[]WhU`Y`cZ'GYUh\`>UW_gcbž U'%) !mYUf!c`X`Vcm'Zfca '6Y``Yj]Yk ž: `cf]XUž'Wcbh]bi Yg'hc`\Ui bh'h\Y Wca a i b]hm'bYUf`m'%) `mYUfg'UZhYf`\]g'i bh]a Y`m'XYUh\"'H\]g`\cff]Z]W Wf]a Yž']bj c`j]b['U'[fci d`cZ'hYYbU[Yfgž'k Ug``YX`VmA]W\UY``G\UbY 6Uf[c`f"ž'k \c`Uh'U[Y'%, 'VYWUa Y': `cf]XU g`mci b[Ygh'dYfgcb`cb XYUh\`fck "'=b`5df]``&\$%%ž'GYUh\`k Ug``i fYX`hc`U`a cV]`Y`\ca Y`Vm \]g'YI ![]f`Zf]YbXž'5a VYf'K f][\hž'i bXYf'h\Y'[i]gY`cZ'gUZYhm''K \Uh Uk U]hYX'\]a `k Ug'ZUf'Zfca 'gUZY/`\Y`k Ug'Vfi hU``m'UhhUW_YXž'g\ch a i`h]d`Y`h]a Ygž'UbX`i`h]a UhY`m'a i fXYfYX`Vm6Uf[c`UbX`\]g UWWca d`]WYgž']bWi X]b[`K f][\h'UbX'?mY'<ccdYf"'H\Y'[fci d g UhhYa dhg'hc`Wcj Yf'i d`h\Y`Wf]a Yž'k \]W\`]bj c`j YX`Vi fb]b[`GYUh\ g VcXmž'a Uf_YX'h\Y`VY[]bb]b[`cZ'U`XUf_`W\UdhYf`]b`^ j Yb]`Y`Wf]a Y]b`: `cf]XUž'XfUk]b[`UhhYbh]cb`hc`h\Y`gYj Yf]hm`cZ'mci h\`j]c`YbW

H\Y'GYUh\'\Ug'gdUf_YX'\\bg'gdUf_YX'\\bg'gdUf_YX'\\bg'giffcibX]b[mci h\ 'j]c`YbWY UbX 'a YbhU``\YU`h\ \dot{z} \][\`][\h]b['g][b]Z]WUbh

H\Y 6fcUXYf =a d`]WUh]cbg

Ua cb[ghmcih\"

5ZhYf'h\Y`]b]h]U``gYbhYbW]b[ž'h\Y`ch\Yf'dYfdYhfUhcfg`ZUWYX`gYf]cig WcbgYei YbWYg'Ug'k Y``/'5a VYf'K f][\hž'?m`Y'<ccdYfž'UbX'i gh]b Gchc'fYWY]jYX``]ZY'gYbhYbWYgž'k \]`Y'7\Uf`]Y'9`mž'U'a]bcf dUfh]W]dUbhžkUgfYYUgYX]b&\$&\$UZhYfgYfj]b[b]bYmYUfg"9UW $2Y^{y} = 2Y^{y} = 2$ UWh]cbgž'WfYUh]b[`f]dd`Yg`cZ'dU]b`h\fci[\cihh\Y'Wcaaib]hmž YqdYWJU``m'Zcf'&UW_qcb q'[f]Yj]b['ZUa]`m"'H\Y]f'`cgq'Wcbh]bi Yq'hc gYfjY'Ug'U'gcVYf'fYa]bXYf'cZ'h\Y'WcbgYeiYbWYg'cZ'j]c`YbWY

&\$&%"

A]WX UY``6Uf[c`k Ug`]XYbh]Z]YX`Ug`h\Y`f]b[`YUXYfž`g\ck]b[`g][bg`cZ Wcbhfc``]b['VY\Uj]cf'UbX'h\fYUhg'df]cf'hc'h\Y'a i fXYfž'YgdYW]U``m hck UfX GYUh\" 5g 6Uf[c g hf]U`i bZc XYXž \Y k Ug gYbhYbWX hc XYUh\`]b`&\$%' žU`qYj YfY`WcbgYei YbWY`Zcf`\]g`fc`Y`]b`h\Y`Wf]a Y" H\]g`gYbhYbWY`kUg`id\Y`X`XYgd]hY`Uf[iaYbhg`Zfca`\]g``UkmYfg Wh]b['gYj YfY a YbhU``\YU`h\ 'W\U``Yb[Ygž']bWi X]b['VfU]b']b'i f]Yg UbX'V]dc`Uf'X]qcfXYf"'9j Yb'Ug'h\Y'qmqhYa 'fYWc[b]nYX'h\YqY ZUWhcfgžih\Y'Wcifh'XYYaYX'h\Y'Wf]aY'hcc'VfihU``hc'a]h][UhY'h\Y gYbhYbW]b[""=b"&\$%-žU"1 fm"cbWY"U[U]b"gYbhYbWYX"\]a "hc"XYUh\ž k \]W\ k Ug``UhYf'WcbZ]fa YX'Vm'h\Y': `cf]XU'Gi dfYa Y'7ci fh']b

H Y Cb[c]b[@Y[U) 6UhhY

=b h\Y Z|fgh a ca Ybhq cZ h\]g [f]a 'ghc fmž GYUh\ fYW]j YX U hYI h a YggU[Y'Zfca '5a VYf'h\Uh'`YX'\]a 'hc'U'Zf]YbX g'\ca Y'k \YfY'\Y k UgʻUa Vi g\YX`Vmh\Y`k U]h]b[`[fci d"`GYUh\`k Ugʻg\ch`UbX VYUhYbžUbX'h\Y'Wf]a Y'k Ug'\]XXYb'Ug'h\YmX]gdcgYX'cZ'\]g'Ug\Yg" H\Y'hYYbU[Yfg'k YfY'ei]W_`m'UffYghYXž``YUX]b['hc'U'hUb[`YX'k YV $cZWcbZYgg]cbg'fY[UfX]b['h\Y]f'Vfi hU`'UWh]cbg''8]X'h\Ym'fYU``m$ i bXYfghUbX`h\Y`Zi```kY][\h`cZ`h\Y]f`Wf]a Y3

UbX'a YbhU`'\YU`h\']qqi Yq']b'ci f'qcW]Yhm"

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

8 Y hU]`g	
Cfh	Gi a a YfZ]Y`Xž: `cf]XUž'I G5
EiY``Yb	• k k k "h\YVi ``Yh]bh]a Y"Wca
	 U``h\ Uhg]b hY f Y gh]b ["Wc a
	 k k k "X ^^"ghUhY "Z`"i g

5g'k Y fYZYWh'cb'h\]g'\YUfhVfYU_]b['WUgYž']hg'j]hU`'hc'fYa Ya VYf h\Y``]jYg'UZZYWhYX bch'f gh'h\cgY``cghž'Vi h'U`gc'h\Y'mci h\'WUi[\h]b'h\Y'k YV'cZ'j]c`YbWY'UbX'dccf'W\c]WYg"'=b'ci f'di fgi]h'cZ'f gh]WYž a Um'k Y'U`gc'gYY_'i bXYfghUbX]b[ž'Wca dUgg]cbž'UbX'gc`i h]cbg h\Uh'ghYYf'Zi hi fY'[YbYfUh]cbg'Uk Um'Zfca 'gi W\'hfU[]Wci hWca Yg"

H\Y`]a dUWhcZGYUh\ g`a i fXYf`fYgcbUhYg`ghfcb[`m`hcXUmžUbX`h\Y WUgY`fYa U]bg`U`dc][bUbh`VYbW\a Uf_`]b`h\Y`X]gW gg]cb`UVci h ^j Yb]`Y`^ gh]WY`fYZcfa g"`: `cf]XU`\Ug`gYYb`gYj YfU``W\Ub[Yg`]b `Uk g`fY[UfX]b[`gYbhYbW]b[ž`dUfh]W``Uf`m`ZcW'g]b[`cb`^ j Yb]`Y cZZYbXYfgž`mYh`W\U``Yb[Yg`dYfg]ghž`\][\`][\h]b[`h\Y`bYYX`Zcf Wcbh]bi ci g`YZZcfhg`hck UfXg`dfYj Ybh]cb`UbX`fY\UV]`]hUh]cb"

WebWfbg']b::`cf]XU g`fi j Yb]`Y`f gh]WY`gmghYa "`H\Y`:`cf]XU 8YdUfha Ybh'cZ`ij Yb]`Y`ij gh]WY`cdYfUhYg'j Uf]ci g`dfc[fUa g`U]a YX Uh'dfYj Ybh]b[`fi j Yb]`Y`XY`]bei YbWm`UbX`dfcj]X]b[`gi ddcfh'hc`Uh! f]g_`mci h\"`5WWcfX]b[`hc`h\Y`: `cf]XU`8YdUfha Ybh'cZ`ij Yb]`Y i gh]WY ž'h\YgY`dfc[fUa g`]bWi XY`W ghcXm`UbX`YXi WUh]cbU` gYfj]WYgž'a YbhU``\YU`h\`gi ddcfhž'UbX`Wca a i b]hm`fY]bhY[fUh]cb]b]h]Uh]j Yg"`K \]`Y`cZZYf]b[`U`fUb[Y`cZ`gi ddcfhž'h\Y`W\U``Yb[Y fYa U]bg.`\ck`hc`YZZYWh]j Y`m`UXXfYgg'h\Y`dgmW\cgcW]U``ZUWhcfg'h\Uh `YUX`mci b[`]bX]j]Xi U`q`Xck b`U`dUh\`cZ`j]c`YbWY"