HUm`cf'7ci bhm'6fUWYg'Zcf'A cfY'A Um\Ya Ug'<i ff]WUbYg'; fck 'Ghfcb[Yf'

HUm`cf`7ci bhm`ZUWYg`cb[c]b[`W\U``Yb[Yg`Zfca`\iff]WUbYgžXf]j Yb`Vm`W]a UhY`W\Ub[Yž`]a dUWh]b[`fYg]XYbhg`UbX]bZfUghfi Whi fY`g]bW'&\$&' "



HUm`cf'7ci bhmž: `cf]XUž'I G5'!' = h\Y'\YUfhcZ'HUm`cf'7ci bhmž: `cf]XUž'fYg]XYbhg'\Uj Y'VYYb'fYY`]b['Zfca h\Y']bhYbgY']a dUWhg'cZ\iff]WUbYgž'U'fYU`]hm'h\Uh'\Ug'VYWca Y'U```hcc'ZUa]`]Uf']b'fYWYbh mYUfg"'G]bW'&\$&' ž'h\Y'Wca a i b]hm'\Ug'ZUWYX'h\fYY'a U'cf\iff]WUbYg.'h\Y'bchcf]ci g'=XU`]Už'Ug'k Y```Ug'8YVVm'UbX'<Y`YbY']b &\$&("'HUm`cf'7ci bhm'7ca a]gg]cbYf'H\ca Ug'8Ya dg'\Ug'VYYb'cbh\Y'Zfcbh`]bYgž'k]hbYgg]b['Z]fgh\UbX'h\Y'`]b[Yf]b['YZZYWhg'h\YgY ghcfa g']bZ]Wh'cb'\ca Yg'UbX'`]j Yg"' = hg'bch'a YfY`m'UVci h'h\Y gY ghcfa g']bZ]Wh'cb'\ca Yg'UbX'`]j Yg"' = hg'bch'a YfY`m'UVci h'h\Y ygY ghcfa g']bZ]Wh'cb'\ca Yg'UbX'`]j Yg"' = hg'bch'a YfY`m'UVci h'h\Y ygY ghcfa g']bZ]Wh'cb'\ca Yg'UbX'`]j Yg'' = hg'bch'a YfY`m'UVci h'h\Y ygY ghcfa g']bYg'dYfa UbYbh'm'' 5g'H\Y'7cc`'8ck b'fYdcfhgž'h\Y ghcfa g'\Uj Y'WU]a YX'cj Yf'&)\$'`]j Yg'UbX'`YX'hc'Uddfcl]a UhY`m "'\$\$'V]``]cb']b'XUa U[Yg'UWfcgg'h\Y'l "G"ž'dU]bh]b['U'ghUf_'d]Whi fYcZ'h\Y'i bZc'X]b['X]gUghYf"

H\]g`mYUf`dfca]gYg`U`g]a]`Uf`m`UWh]j Y`\i ff]WUbY`gYUgcbž`k]h\`h\YBUh]cbU``CWYUb]WUbX`5ha cgd\Yf]W5Xa]b]ghfUh]cb`fBC55Ł ZcfYWUgh]b[`i d`hc`%+`bUa YX`ghcfa g"`5g`cWYUb`k UhYfg`k Ufa UhY`bX`WcgY`m`h]YX`hc`W]a UhY`W\Ub[Y h\Y`]bhYbg]hm`cZ`h\YgYghcfa g`]g`YI dYWhYX`hc`f]gYž`Vf]b[]b[`k]h\`h\Ya`a cfY`XYghfi Wh]j Yghcfa 'gi f[Yg`h\Uh'dcgY`U`g][b]Z]WUbh`h\fYUh`hc`WcUghU`Wca a i b]h]Yg"

HY @cWU = a dUWh cZ 7 a $UhY 7 \ Ub[Y]$

FYg]XYbhg``]_Y`5bb`<cX[Yg`UfY`]bWfYUg]b[`m`Uk UfY`cZh\Y]bZi YbW`W]a UhY`W\Ub[Y`\Ug`cb`h\Y]f`k YUh\Yf`dUhhYfbg`UbX`h\YgYj Yf]hm`cZghcfa g"`H\Y`XYj UghUh]cb`k fci [\h`Vm`<i ff]WUbY
<Y`YbY`]g`U`WUgY`]b`dc]bh/`Ufci bX`-\$i `cZ`\ca Yg`]b`?YUhcb`6YUW\k YfY`XYghfcmYXž`k]h\`XUa U[Yg`YI WYYX]b[``)\$`a]``]cb"
6i g]bYgga Ub`*JfYX`<i bh`]g`Ua cb[`h\cgY`ZUW]b[`UfXi ci gfYVi]`X]b[`W\U``Yb[Yg`UZhYf``cg]b[`Vch\`\]g`\ca Y`UbX`Vi g]bYgg`hc
<Y`YbY"`<Y`]g`W`ffYbh`m`i g]b[`gYa]!hfU]`Yfg`Ug`hYa dcfUfm``]j]b[
gdUWYg`k\]`Y`[fUdd`]b[`k]h\`]bgi fUbWY`WU]a g`UbX`fYWcbghfi Wh]cb

DfYdUf]b[Zcfh\Y: i hi fY

H\Y`]bWfYUgYX`ZfYeiYbWmcZ`\iff]WUbYg`Wcad`]WUhYgdfYdUfYXbYgg`YZZcfhg"`5g`fYdcfhYX`Vm`BDFž'<iff]WUbY`A]`hcb`]gcb`h\Y`\cf]ncbž'h\fYUhYb]b[`UfYUg`fYWYbh`m`UZZYWhYX`Vm`<Y`YbY"

 $\label{eq:continuous_continuou$

5g'HUm`cf'7ci bhm'[fUdd`Yg'k]h\ h\ Y'UZhYfa Uh\ cZ'h\ YgY\iff]WUbYgž'h\ Y'`Yggcbg'UfY'WYUf"'H\ YfY g'U'dfYgg]b['bYYX'Zcf Wca a i b]h]Yg'hc'Vccgh'h\ Y]f'fYg]`]YbWY'U[U]bgh'gi W\ bUhi fU`X]gUghYfg"'H\]g'WUb']bWi XY']bj Ygha Ybh']b']a dfcj YX'Vi]`X]b[ghUbXUfXgž'dfYgYfj]b['j]hU`'k Yh`UbXgž'UbX'Ybgi f]b[']bZfUghfi Whi fYWUb'k]h\ghUbX'f]g]b['gYUg'UbX'gi f[Yg"'Cb`m'h\fci [\'WccdYfUh]j YYZcfhg'WUb'Wca a i b]h]Yg'`]_Y'HUm`cf'7ci bhm'VY[]b'hc'bUj][UhYh\YgY'hi fVi `Ybh'k UhYfg"'H\Y'\cdY']g'h\Uh'Vm'UWh]j Y`m'Yb[U[]b[k]h\'h\YgY'W\U``Yb[Ygž'fYg]XYbhg'WUb'bch'cb`m'fYVi]`X'Vi h'U`gcghfYb[h\Yb'h\Y]f'Wca a i b]h]Yg'Zcf'h\Y'Zi hi fY"

8 YhU]`g	
Cfh	HUm`cf'7ci bhmž': `cf]XUž'l G5
EiY``Yb	• kkk"h\YWcc`Xckb"Wca
	• kkk"YVgWc"Wca
	k k k "bdf"cf[

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