## GYj YfY Ghcfa 'K fYU\_g'< Uj cW]b '@U\_Y`UbX A cV]`Y'< ca Y'7ca a i b]hm

5 'gYj YfY 'ghcfa 'cb' i bY '%\$ 'XUa U[ YX'a cV]`Y'\ca Yg']b @U\_Y`UbXž'fU]g]b[ 'WcbWYfbg'Zcf'fYg]XYbhg'U\YUX'cZ'\i ff]WUbY gYUgcb"



@U\_Y`8YYgcb`J]``U[Yž`@U\_Y`UbXž: `cf]XUž`I G5`!`Cb`¾ bY`%\$ž
&\$&) ž`U`gYj YfY`h\i bXYfghcfa `gk Ydh`h\fci [\`@U\_Y`UbXž: `cf]XUž
`YUj]b[`U`hfU]``cZ`XYghfi Wh]cb`]b`]hg`k U\_Y"`H\Y`a cV]`Y`\ca Y
Wca a i b]hm`cZ`@U\_Y`8YYgcb`J]``U[Y`k Ug`dUfh]W``Uf`m`\UfX`\]hž`k]h\
a i `h]d`Y`fccZg`Wc``Udg]b[`i bXYf`h\Y`k Y][\h`cZ`h\Y`ghcfa g`Z] fm'
: cfhi bUhY`mž`fYg]XYbhg``]\_Y`8Uj]X`; fi VVg`UbX`\]g`ZUa]`m`k YfY
i b\Ufa YXž'Ug`h\Ym`k YfY`]bg]XY`h\Y]f`a cV]`Y`\ca Y`k\Yb`h\Y
ghcfa `ghfi W\_"`H\Y`fccZ`WUj YX`]bž`Vi h`h\Ub\_Zi ``mž`h\]g`\UddYbYX`]b
i bc\WW d]YX`fcca g"`; fi VVg`k Ug`i bUk UfY`cZ'h\Y`YI hYbh`cZ`h\Y
XUa U[Y`i bh]``\Y`fY\W]j YX`U`\W\```Zfca `GdY\Mfi a `BYk gž
\][\`][\h]b[`\ck 'ei]\W\_`mh\]b[g`\Wb`\W\Ub[Y`k\Yb`bUhi fY
i b`YUg\Yg`]hg`dck Yf"

; fi VVg fYWci bhYX \ck \Y ]b]h]U``m'a ]ghcc\_'h\Y gci bXg'Xi f]b[ 'h\Y ghcfa 'Zcf'h\Y WfYU\_]b[ 'cZ\]g'Zfcbh'Xccf"' =h\ci [\h']h'k Ug' Agh'h\Y k]bXž '\Y gU]Xž'VYZcfY h\Y fYU`]hm'cZ'h\Y ghcfa g']a dUWh'gYh']b" FYZYWh]b[ 'cb'\]g'dUgh'YI dYf]YbWygž'\Y Wca dUfYX h\Y fYWYbh Yj Ybhg'hc' <i ff]WUbY A]`hcb'k \Yb'\]g'ZUa]`mg'hfU]`Yf'k Ug'fYd`UWYX Vm'FYVi]`X': `cf]XU'UZhYf'gi ghU]b]b[ 'XUa U[Y"'K]h\'h\Y'\i ff]WUbY gYUgcb'UddfcUW\]b[ž'; fi VVg'\Ug'j c]WYX'i bXYfghUbXUV`Y WcbWYfbg'UVci h'k \Uh`]Yg'U\YUXž'fYWc[b]n]b[ 'h\Y'f]g\_g']bj c`j YX ]b``]j ]b[ ']b'U'ghUhY'ZfYei Ybh`m'VUhhYfYX'Vm'gYj YfY'k YUh\Yf"

## IbXYfghUbX]b['h\Y'GWcdY'cZ'Ghcfa'8UaU[Y

H\Y']a d`]WUh]cbg'cZ'gi W\'ghcfa g'YI hYbX'VYmcbX'dYfgcbU``ghcf]Yg" H\Y'BUh]cbU``CWYUb]WUbX'5ha cgd\Yf]W5Xa ]b]ghfUh]cb'fBC55Ł a U]bhU]bg'U'Wca dfY\Ybg]j Y'Ghcfa '9j Ybhg'8 UhUVUgY'h\Uh XcW'a Ybhg'cWW'ffYbWg'cZ'g][ b]Z]WUbh'k YUh\Yf'd\Ybca YbU" H\YgY'Yj Ybhg'WUb'`YUX'hc'`cgg'cZ'`]ZYž']b'\f\fmz'UbX'Wcbg]XYfUV`Y dfcdYfhm'XUa U[ Yž'bch'hc'a Ybh]cb'X]gfi dh]cbg'hc'`cWU`'Wca a YfWW'' H\Y'XUhUVUgY'Wcj Yfg'fYWcfXg'Zfca '\$Jbi Ufm'%-) \$'hc'A UfW\'&\$&) ž dfcj ]X]b[']bg][ \h']bhc'bch'\f\gha YX]U'UhhYbh]cb"

H\]g`fYgci fWY`g\YXg``][\h`cb`\ck `ghcfa gž``]\_Y`h\Y`cbY`h\Uh fYWYbh`m`]a dUWhYX`@U\_Y`UbXž`WUb`\Uj Y`ZUf!fYUW\]b[`YZZYWhg"`H\Ym WUdhi fY`XUhU`bch`cb`m`cb`\i ff]WUbY!fY`UhYX`XUa U[Yg`Vi h`U`gc`h\Y VfcUXYf`gdYWhfi a `cZ`a YhYcfc`c[]WU``\UddYb]b[gž`gi W\`Ug`fYWcfX hYa dYfUhi fYg`cf`i bi gi U``k YUh\Yf`Zcf`WYfhU]b`fY[]cbg"`H\Y g]hi Uh]cb`]b`@U\_Y`UbX`gYfj Yg`Ug`U`dc][bUbh`fYa]bXYf`cZ`h\YgY ghcfa `fYU`]h]Ygž`k]h\`XUhU`g\ck]b[`\ck `Wca a i b]h]Yg`UfY Wcbh]bi U``m`gi V`YWhYX`hc`bUhi fY g`i bdfYX]WhUV]`]hm"

## H\Y'<i a Ub'9`Ya Ybh']b BUhi fU`8]gUghYfg

FYg]XYbhg``]\_Y`; fi VVg`Ya VcXm'h\Y`fYg]`]YbWY`Zci bX`]b`: `cf]XU g Wca a i b]h]Yg"`8Ygd]hY`h\Y``cca ]b[ `W\U``Yb[ Yg`cZ'h\Y`i dWca ]b[ \i ff]WUbY`gYUgcbž`\Y`YI dfYggYX`WcbZ]XYbWY`]b`\]g`UV]`]hm`hc`ZUWYUbm`cVghUWYg`h\Uh`Ya Yf[ Y"` Mci ``YUfb`hc`\Uj Y`U`[ ccX`\UbX k \Yb``]j ]b[ `\YfYž ; fi VVg`fYa Uf\_YXž`g\ck WUg]b[ `h\Y`UXUdhYX

dgmWXY'cZ: `cf]X]Ubg'k \c'ZUWY'h\YgY'WcbX]h]cbg'fYdYUhYX`m"' in g'U
`]ZYghm`Y'Wc`cfYX'Vm'h\Y'Uk UfYbYgg'h\Uh'k\]`Y'ghcfa g'Wca Y'UbX
[cž'Wca a i b]hm'gc`]XUf]hm'UbX'dfYdUfYXbYgg'UfY'Wfi W]U`"

 $\label{eq:continuous_series} 5g^@U_Y`UbX g^fYg]XYbhg^VY[]b^hc^UggYgg^UbX^fYWcj^Yf^Zfca^h\YXUa^U[Y^k fci^[\h^Vm^h\Y^fYWbh^ghcfa^z^]hg^Yj]XYbh^h\Uh^h\Yghcfl^Yg^cZ^]bX]j]Xi^U^g^]bhYfhk]bY^k]h\^VfcUXYf^dUhhYfbg^bchYX^]b^h\Y^BC55 g^fYdcfh]b[^"Gi^W\]bghUbW^g^g\ck^WUgY^h\Y^dYfg]ghYbh^XUbW^VYhk^YYb^gYj^YfY^k^YUh\Yf^UbX^\ia^Ub^fYg]^]YbWW^"^H\YZi^hi^fY^\c^Xg^i^bW^fhU]bh]Ygz^Vi^hcbY^h\]b[^"]g^WYUf.^h\YXYhYfa^]bUh]cb^hc^fYVi^X^UbX^ghUbX^ghfcb[^"]b^h\Y^ZUWY^cZ^UWY^cZ^UXj^fg]hm^]g^k^cj^Yb^]b^hc^h\Y^j^Yfm^ZUVf]WcZ^:^cf]XU^g^]XYb^h]hm''$ 

| 8 Y hU]`g |   |
|-----------|---|
| Cfh       | @U_Y`8YYgcb`J]``U[Yž`@U_Y`UbXž': `cf]XUž'l G5 |
| EiY``Yb   | • VUmbYk g- "Wca                              |
|           | • k k k "bWXWbcUU"[cj                         |

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