

7ci fgY`Cj Yfj JYk

`GHUZZ7cbhUWhi8YHJ`g`

`7cbj Ybcfg`

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWWhcb	D\cbY
7`Ui XjU`HUnfY]hYf	WhUnfY]hYf4 i bgk "YXi "Ui	Hi YgXUm%&da	A 6`%*&	- ' ,) ' * - %

GWXcc``7cbhUWhi`bZcfa Uhjcb

GWXcc``cZGcWU`GWYbWg

Fcca`%) -

A cfj Yb`6fck b`7 &\$

Ya Uj`.gcgg4 i bgk "YXi "Ui

d\cbY. '\$&-' ,)`% \$+

7ci fgY'8YHJ]`g

7fYX]hDc]bqg`*`

Gi a a UfmcZ\hY'7ci fgY

BchY. H\]g:]g'U'%&! C 7`Wci fgY"McI`k]`Ybfc`]b`*`! C 7`]b`YUW`cZfk`c`gi`Ww]gg] Y`hYfa`g`k`]h`U`fYgi`h`fYdcfYX`VmU`g]b[`Y`[fUXY`UhH`Y`YbX`cZ`hY`gYV`bX`*`! C 7`Wci fgY"

H\]g:]g'U`W`fY`W`ci fgY`Z`f`<`cbci fg`W`bX]X`U`f`g`]b`h`Y`G`V`X`c`c`Z`G`c`W`U`G`W`Y`b`W`g`U`b`X`h`Y`a`U`]b`Z`c`W`g`k`]`V`Y`h`Y`ei`Y`g`h`c`b`c`Z`a`Y`h`c`X`c`c`[`m`9`U`V`X`g`Y`a`]b`U`f`k`]`c`c`_`U`h`X`]Z`Y`f`b`h`U`d`d`f`c`U`W`X`Y`g`h`c`f`Y`g`Y`U`f`W`U`W`f`c`g`g`h`Y`g`i`V`!`X`]g`W`d`]b`Y`g`U`b`X`k`]`Y`I`d`c`f`Y`k` \`U`h`k`Y`a`][` \`h`W`h`Y`g`c`k` \`U`h`c`Z`U`d`U`f`h`W`U`f`a`Y`h`c`X`c`c`[`m`g`U`b`U`m`h`W`U`Y`j`Y`f`U`[`Y`K` \`m`X`c`h`Y`G`c`W`U`G`W`Y`b`W`g`V`f`Y`U`_`]b`c`a`m`f`]U`X`z`W`e`a`d`Y`h`b`[`a`Y`h`c`X`c`c`[`]Y`g`3`7`U`b`k`Y`X`Y`g`W`]V`Y`ci`f`a`Y`h`c`X`c`c`[`]Y`g`U`g`g`W`Y`b`h`Z`W`U`b`X`]Z`b`c`z`h`Y`b` \`c`k`X`c`k`Y`V`Y`g`h`g`Y`W`f`Y`U`b`c`h`c`b`c`Z`U`W`W`f`U`W`h`U`b`X`i`g`Y`Z`b`Y`g`g`3`<`c`k`X`c`Y`g`c`i`f`i`b`X`Y`f`g`h`U`b`X`]b`[`c`Z`Y`]X`Y`b`W`U`W`h`U`m`W`X`U`b`[`Y`c`i`f`f`Y`g`Y`U`f`W`a`Y`h`c`X`g`U`g`k`Y`U`g`h`Y`c`i`h`W`e`a`Y`g`U`b`X`W`c`b`W`i`g`]c`b`g`h`U`h`k`Y`a`][` \`h`f`Y`U`W`X`3`

7ci fgY`@YUfb]b[`Ci hW`a Yg

%`5`d`d`m`i`W`h`W`h`]b`_]b[`U`b`X`U`b`U`m`h`W`g`_]`g`&`9`Z`Y`W`j`Y`m`X`Y`d`c`m`U`d`U`f`h`W`U`f`h`Y`c`f`m`c`f`a`Y`h`c`X`c`c`[`]W`U`d`d`f`c`U`W`X`'`" `8`Y`g`[`b`U`b`X`g`i`g`h`U`]b`U`b`U`f`[`i`a`Y`b`h`z`c`f`d`c`]b`h`c`Z`]`]Y`k`(`

V]V`c[fUd\mVi h]bWi gjj Y`cZYj Yfmi]b[`Y`gY"Mc i `k]`cgY') i `dYf%\$\$`k cfXg`cj Yf`hY`%\$\$\$`k cfX`]a]h`
H\Y`ghUbXUfXg`U[U]bghk \]W`h`g`UggYgga Ybhk]`VY`Yj U`i UH`X`UfY`]b`hY`fi Vf]W`Uj U]UV`Y`cb`A ccX`Y"

Mc i `a i ghgi Va]hmc i f`X]gW`gg]cb`dUdYf`hc`Hi fb`~~hb~~]b`A ccX`Y`Vm%\$Ua `H\i fgXUm`&`h`A UfW`""`=
k]`bchUW`W`dhgi Va]gg]cbg`VmYa U]`"

H\Y` : UW`h`m`U`H`dYbU`h`m]g') i `cZ`h`Y`h`hU`d`cgg]V`Y`a Uf_g`Z`f`h`Y`hUg_`Z`f`YUW`XUmcf`dUfhXUm`h`Uh`h`Y`

5XX]h]cbU`XYHJ]`g.

H\Y`h]fX`UbX`Z]bU`UggYgga YbhUg_`Zc`f`h]g`Wc`i`fgY`]g`h`Y`fYgYUfW`d`UdYf`" `b`h]g`d`UdYf`Z`mci` `a`i`gh`
UXXfYgg`h`Y`Z`c`k`]b[`h`fY`ei`Ygh]cbg`z`k` \]W`UfY`h`Y`gUa`Y`h`fY`h`c`d]Wg`h`U`h`Y`[`i`Yghd`fY`g`Y`b`h`f`g` \Uj`Y`
UXXfYggYX`YUW`k`YY`_`h`fci`[` \`ci`h`h`Y`g`Ya`Ygh`f`.

%`K` \`UhX]gW]d`]bUfmiUbX`gW`c`Uf`m`f`U`X]h]cbg`#`dYfgdYW]j`Yg`#`gYbg]V`]h]Yg`Xc`mci` `Vf]b[`h`c`h`Y`
fYgYUfW`h`U`h`mci` `k`]`Xc`h`h]g`m`Y`Uf3`
&"`<`ck`Xc`h`Y`g`Y`X]gW]d`]bUfmiUbX`gW`c`Uf`m`f`U`X]h]cbg`#`dYfgdYW]j`Yg`#`gYbg]V`]h]Yg`UZZY`W`h`h`Y`fYgYUfW`
h`U`h`mci` `UfY`Xc]b[`3`
'`" `<`ck`Xc`h`Y`g`Y`YU`X`h`c`d`U`f`h]W` `Uf`k`U`m`g`c`Zi`bXY`f`g`h`U`b`X]b[`UbX`fYgYUfW]b[`h`Y`g`c`W]U`k`c`f`X3`K` \`Uh`
UfY`h`Y`g`h`f`Y`b[`h`g`U`b`X`]`ja`]h]h]cbg`c`Z`mci`f`X]gW]d`]bUfmi`#`gW`c`Uf`m`d`Y`f`g`d`Y`W]j`Y3`

Mci`g`l`ci`X`Yi`d`c`f`Y`h`Y`g`Y`ei`Ygh]cbg`UbX`fYZY`W`i`dcb`h`Ya` `VY`Z`c`f`Y`k`f]h]b[`i`d`U`h`ci`[` \`h] `UbX`dYfgcbU`
m`Y`h`g`W`c`Uf`m`d`UdYf`" `9`UW`g`Y`W]cb`g`l`ci` `X`XY`j`Y`c`d`Ub`Uf[`i`a`Ybh`c`f`g`Y`h`c`Z`Uf[`i`a`Ybh`g`UbX`h`Y`d`UdYf`Ug`U`
k` \`c`Y`g`l`ci` `X`VY`V`c`h` `W`c` \`Y`f`Y`b`h`U`b`X`W`c` \`Y`g]j`Y`" `K`Y`k`]`gd`Y`b`X`h]a`Y`]b`W`U`g`g`X]g`W`g]b[` \`ck`h`c`U`d`d`f`c`U`W`
h]g]U`g`g`Y`g`g`a`Y`b`h`U`b`X`Z`f`h`Y`f`Y`g`c`i`f`W`g`U`f`Y`Uj`U]U`V`Y`c`b`A`c`c`X`Y`"

Mci`g`l`ci`X`W`c`b`X`i`W`h]b`X`Y`d`Y`b`X`Y`b`h`f`Y`g`Y`U`f`W`h`c`g`i`d`d`c`f`h`h`Y`Uf[`i`a`Ybh`g`mci` `XY`j`Y`c`d`]b`mci`f`f`Y`g`Y`U`f`W`d`UdYf`
UbX`h`Y`d`UdYf`a`i`gh`VY`U`d`d`f`c`d`f]U`h`m`f`Y`Z`Y`f`Y`b`W`X`]b`U`W`c`f`X`U`b`W`k`]h`h`Y`E`U`Z`a`a`^`a`X`E`a`U[S`^`E`U]W`U`W`
D`V`W`d`W`U[`Y`9`g[V`W]b`_`Y`X`V`Y`c`k`z`k`]h`U`f`Y`Z`Y`f`Y`b`W`"]ghd`f`Y`g`Y`b`h`X`U`h`h`Y`Y`b`X`c`Z`h`Y`d`UdYf`" `H` \`Y`k`c`f`X`]`ja`]h]g`
Yi`Wi`g]j`Y`c`Z`h`Y`V]c[`f`U`d` \`m`Vi`h]b`Wi`g]j`Y`c`Z`Y`j`Y`f`m`h]b[`Y`g`Y`" `Mci`k`]`c`g`Y`) `i`d`Y`f`%`\$`\$`k`c`f`X`g`c`j`Y`f`h`Y`
(`\$\$\$`k`c`f`X`]`ja`]h`H` \`Y`g`h`U`b`X`U`f`X`g`U[`U]b`g`h`k` \]W`h`h]g]U`g`g`Y`g`g`a`Y`b`h`k`]`V`Y`Y`j`U`i`U`h`X`U`f`Y`]b`h`Y`f`i`V`f]W`
Uj`U]U`V`Y`c`b`A`c`c`X`Y`"

Hi`fb]h]b`g`Y`h]b[.`H` \]g]U`g]g[`ba`Y`bh]g]g`i`Va`]h`Y`X`h`fci`[` \`Hi`fb]h]b`UbX`g`h`XY`bh`g`W`U`b`g`Y`Y`Hi`fb]h]b`g]a`]Uf]m`
f`Y`d`c`f`g`"

F Ygci fWg

DfYgWfjVYX`F Ygci fWg`

K YY_mjbgfi Wjcbg`UbX`fYgci fWg`k j`VY`Uj UjUV`Y`cb`A ccX`Y"

F YWca a YbXYX`F Ygci fWg

7ci fgY`9j U`i Uhjcb`UbX`8Yj Y`cda Ybh

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Hi fb]h]b`Gi Va]gg]cb

≠mci`YbWci bhYf`U`dfcV`Ya`k`Yb`U`H`Ya`dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]h]b`z`d`YUgY`
H`Y`d`cb`Y`9I`H`fb`U`Gi`ddcfh`cb`-`,`),`''`'`%`cf`Ya`U]`h`Ya`cb`YI`H`fb`U`H`hgi`ddcfh`4`i`bgk`"YXi`"Ui`""`Gi`ddcfh`
`ci`fg`UfY`,`.\$\$Ua`-`%\$.\$\$da`cb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`cb`k`YY`YbXg`fI`*)`XUmg`U`mY`UfL`≠mci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`Xi`Y`hc`U`ZU`hik`]h`Hi`fb]h]b`mci`a`Um`Udd`mi`Zc`f`Ub`YI`H`bg]cb`z`Vi`hmc`i`
a`i`gh`f`Y`h]b`mci`f`h]W`Y`hbi`a`VYf`Z`ca`9I`H`fb`U`Gi`ddcfh`f`U`cb[`k`]h`Ub`mc`h`Y`f`fY`Yj`Ub`h`Xc`W`a`Y`b`hg`L`hc`
]b`Wi`XY`Ug`Yj`]X`Y`b`W`hc`gi`ddcfh`mci`f`YI`H`bg]cb`Udd`]W`h]cb`≠mci`Ya`U]`9I`H`fb`U`Gi`ddcfh`mci`k`]`

5 WUXYa]W<c bYghmiUbX 'D`U[]Uf]ga

D`U[]Uf]ga 'g'i g]b['hY`k cfXg'cf]XYUg'cZchYfg'UbX'dfYgYbh]b['hYa 'Ug'mci f'ck b" 'hWUb'hU_Y'a Ubm
Zcfa gžZca 'XY`]VYfUh'`WXYUh]b['h'UWV]XYbhU`miW'cdm]b['Zca 'U'gci fW'k]h'ci hUW_bck `YX[Ya Ybh'

I BGK '[fci dg'd`U[]Uf]ga ']bh' hY`Zc`ck]b['WUHY[cf]Yg.

7 cdm]b[.i g]b['hY`gUa Y'cf'j Yfmg]a]Uf'k cfXg'h' hY'cf][]bU`hI hcf']XYU'k]h'ci hUW_bck `YX[]b['hY

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc']W'h
- VY'Uk UfY'cZ'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmc'by']b'h'Y'I BGK 'W'a a i b]m
- 'cW'W'h'gYfj]W'g'UbX']bZ'fa U]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZ'Y'gY'UfY'Ug'k]''VY'ZJa]]Uf'hc'mci ž'c'h'Y'fg'k]''VY'bYk "'; U]b]b['U'gc']X'i bXYfghUbx]b['cZU''h'Y fY'U'Y'X'UgdY'W'g'cZ9@-G9'k]''\Y'd'mci 'a U_Y'h'Y'a cgh'cZ'mci f'gh X]Yg'Uhl BGK ""

[\h'hd.##gi V'Y'W'f'i \]X'Y'g'' \]V'f'U'f'm'i b'gk "Y'X'i "U'i #' \]g'Y'# \]V'c'i h' \]g'Y](#)

5 WUXYa]WbZcfa Uh]cb`

: cfYggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`rc.

- fYei Ygh]Zc`fYI hYbg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZY`mdc`]WYg/

