



7ci fgY`Cj Yfj]Yk

GhJZZ'7cbhJWw'8YhU]`g

7cbj Ybcfg

| | | | | |
|-------------------|----------------------------|-----------------|---------|----------------------------|
| B Ua Y | 9a U]` | 5j U]UV]]m | @cWjhcb | D\cbY |
| A Uth\Yk `?YUfbYg | a "_YUfbYg4 i bgk "YXi "Ui | 6miUddc]bha Ybh | A 6' *) | D`YUgY`Ya U]` ei Yf]Yg" |

GWxcc``7cbhJWw'Zcfa Uh]cb

GWxcc``cZ<i a Ub]h]Yg`UbX:@Jb[i U[Yg

@cWjhcb. 'GWxcc``C Z]Wz'A cfj Yb'6fck b'6i]X]b[ž@Yj Y`&ž&),

CdYb]b['<ci fg.'A cbXUm! : f]XUmž - Ua '!) da

7ci fgY'8YHJ]`g

7fYX]hDc]bqg`*`

Gi a a UfmicZ\hY'7ci fgY

H\]g`Wci fgY`]bffcXi Wg'mci`hc`hY`\]gfcf]WU`žgcW]U`UbX`W`h`fU`]a`d`]WU]cbg`cZ`hY`k`UghYg`[`YbYfU`hY`X`Vm
\i`a`Ub`gcW]Ym`"8]a`Ybg]cbg`UbX`hcd]Vg`mci`gfi`Xm]bW`XY`"]Z`W`WYg`cZa`U`hY`f]U`gž`ck`k`Y`a`U`_Y
`_bck`YX[`Y`UVci`hk`UghY`ž`hY`gcW]U`]a`d`]WU]cbg`cZk`UghY`a`UbU[`Ya`Yb`hY`W`bc`c[`]Ygž`fY[`]U`W`f]ggi`Yg`UbX
`hY`f`W`c]g]U]cb`cZ`hY`Z`h`fYfVmk`UghY`g`"C`i`f`k`UghY`g`fY`Ua`YI`Ua`d`Yg`]bW`XY`d`UghY`gž`k`U`hY`f`UbX
`gYk`U[`Yž`bi`WYUf`a`U`hY`f]U`gž`]bXi`g`f]U`gYU`Xi`a`d]b[`ž`]b`hY`fb`U]cb`U`h`f`UXY`]b`h`c`I`]Wk`UghY`gž`Xca`Ygh]W`UbXZ`ž
`UbX`hY`W`Y`U]cb`cZ`f`k`UghY`UbX`gf]UbX`W`c`b`h`Ja`]b`U`hY`X`g`]hY`g`"M`ci`YI`d`c`fY`gc`i`h`c`bg`h`c`h`Y`[`YbYfU]cb`cZ
`k`UghY`g`Vm`gh`Xm]b[`h`Y`d`fY`W]i`h`c`b`U`f`m`d`f]b`W]d`Y`ž`Y`bj`]f`c`ba`Y`b`h`U`"↑`gh]W`ž`]b`hY`fb`U]cb`U`k`UghY`W`c`bj`Y`b`h`c`bg

5ggYgga Ybh

5ggYgga YbhHUg_g`

| | | | |
|---|----------|--------------------------|--|
| 5ggYgga YbhHUg_ | K Y][\h | 8i Y'8UHŸ | Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX |
| 9ggUmi | ') | %* #/\$#&\$&\$'%%\$\$'DA | %ž&ž ž) |
| K UghŸ: i hi fYg'!': fci d DfYgYbhUH]cb` | &\$ | Bch5dd`]WUVY | %ž ž(|
| K UghŸ: i hi fYg'!':]bU` F Ydcfh | () | &+ #/%%#&\$&\$'%%\$\$'DA | %ž&ž ž(ž) |

5ggYgga Ybh8YHU]`g

5ggYgga Ybh%9ggUm

GHUfhXUHŸ. Bch5dd`]WUVY

@Yb[h. % \$ \$'k c fXg

8YHU]`g.

8Yg][b'mci fYggUmhcd]WŸc U`ck 'mci 'hc 'Udd'mihŸY fYUX]b[g'hc WcbŸYa dcfUfm]ggi Yg'cZk UghŸ"

hX]j]Xi U`ZYXVUW`k]`VY'dfcj]XYX VmhŸY`YWh fYf#i hc f"

Hi fb]hb'gYH]b[. H\]g Ugg][ba Ybh]g'gi Va]hŸX'h'fci [\ Hi fb]hb'UbX'gh XYbŸg WUb'gYY'Hi fb]hb'g)a]Uf]m
fYdcfŸg %o

5 hYbXUbW F Yei]fYa Ybhg

Gh XYbhg UFY gfhcb[mYbWci fU[YX'hc UhhYbX'U''WUggYg UbX'fYj]Yk ''YWhi fY'fYWcfX]b[g"

7 ci fgY'GWXYXi `Y

[J \]Yk WUgg'ha YhUVY](#)

H]a YhUV`Y`

| 8UhY | HmdY | 7cbhYbh |
|---|--|---|
| K YY_%`%(`GYdhYa VYf! %`GYdhYa VYf | GYa]bUf | K \Uh]g`k UghY3` 7 ci fgY`cj Yfj]Yk . :`bhfci Xi W]cb'hc`k UghY""A UhhYf]b[" F YUX]b[g`Uj U]UV`Y`j]U`Wci fgY``Y[Ubhc`g]hY" |
| | C b`]bY`5W]j]hm | C b`]bY`UW]j]hYg`Uj U]UV`Y`j]U`hY`Wci fgY`a ccX`Y`g]hY" |
| K YY_`&.`&%GYdhYa VYf! &)`GYdhYa VYf | GYa]bUf | H\Y`F cUf]b[`-%`&\$g.`b] Ybh]b[`hY`7cbgi a Yfz` F Y]bj Ybh]b[`K UghY`fDfcZ`B]Wc`Ug`F Uga i ggYbE` F YUX]b[g`Uj U]UV`Y`j]U`Wci fgY``Y[Ubhc`g]hY" |
| | C b`]bY`5W]j]hm | C b`]bY`UW]j]hYg`Uj U]UV`Y`j]U`hY`Wci fgY`a ccX`Y`g]hY" |
| K YY_`'`.&.`GYdhYa VYf! &`C`Wc`VYf | GYa]bUf | K UghYfYX`E`hY`c`fm` F YUX]b[g`Uj U]UV`Y`j]U`Wci fgY``Y[Ubhc`g]hY" |
| | C b`]bY`5W]j]hm | C b`]bY`UW]j]hYg`Uj U]UV`Y`j]U`hY`Wci fgY`a ccX`Y`g]hY" |
| K YY_`(`.)`C`Wc`VYf!`-` C`Wc`VYf | <ca Yk cf_ | DI 6@7`<C@85M` . |
| | GWYYb]b[| 5gmbWkfcbei g`gYa]bUf!`[Yc[fUd\]Yg`cZi fVUb` XYWUm` |
| | C b`]bY`5W]j]hm | C b`]bY`UW]j]hYg`Uj U]UV`Y`j]U`hY`Wci fgY`a ccX`Y`g]hY" |
| K YY_`)`.%&`C`Wc`VYf!`!*` C`Wc`VYf | GYa]bUf9j YfmXUmik UghY`d` 9j YfmXUmik UghY`dfUW]Wg` | 9j YfmXUmik UghY`dfUW]Wg` . |
| | C b`]bY`5W]j]hm | C b`]bY`UW]j]hYg`Uj U]UV`Y`j]U`hY`Wci fgY`a ccX`Y`g]hY" |
| | | |

| | | |
|--|--|--|
| | | |
| | | |
| | | |
| | | |

Gi Va]gg]cb`cZ5ggYgga YbhiHUg_g

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

Ʒmci`YbWci bHYf`U`dfcV`Ya`k` \Yb`UH`Ya` dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`h`fci`[`\`Hi`fb]h]b`z`d`Y`Ug`Y`
HY`Yd`cb`Y`9I`HY`fb`U`Gi`ddc`fh`cb`-`,`)`"``"``%`cf`Ya`U]`h`Ya`i`cb`YI`HY`fb`U`HY`hgi`ddc`fh`4`i`bgk`"YXi`"Ui`"Gi`ddc`fh`
`l`ci`fg`UfY`,`.\$`\$Ua`-`-%`\$.\$`\$da`i`cb`k`YY`_X`Umg`U`bX`-`.\$`\$Ua`-`-`).`.\$`\$da`i`cb`k`YY`_Y`bX`g`f`l`*)`X`Umg`U`m`Y`U`f`l`"Ʒmci`
UfY`i`b`UV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`Xi`Y`hc`U`Z`Ji`h`k`]h`Hi`fb]h]b`mci`a`Um`Udd`m`Z`f`U`b`YI`HY`bg]cb`z`Vi`hmc`i`
a`i`gh`f`Y`h]b`mci`f`h]W`Y`hbi`a`VY`f`Z`ca`9I`HY`fb`U`Gi`ddc`fh`f`U`cb[`k`]h`U`b`m`c`h`Y`f`f`Y`Y`U`b`h`X`c`W`a`Y`b`h`g`k`hc`
]b`Wi`XY`U`g`Y`j`]X`Y`b`W`hc`gi`ddc`fh`mci`f`YI`HY`bg]cb`Udd`]W`h]cb`"Ʒmci`Ya`U]`9I`HY`fb`U`Gi`ddc`fh`mci`k`]`
Ui`hc`a`U`h]W`U`m`f`Y`W`]j`Y`U`h]W`Y`hbi`a`VY`f`z`Vi`h]Z`mci`HY`Yd`cb`Y`mci`k`]`b`Y`Y`X`hc`gd`Y`W`Z]W`U`m`U`g`_`Z`f`c`b`Y`"
Hi`fb]h]b`U`gc`d`fc`j`]X`Y`g`i`d`X`U`h`Y`g`c`b`h`Y`]f`g`m`g`h`Y`a`i`g`h`U`h`g`c`b`H`k`]h`Y`f`"

;`Yb`Y`f`U`m`z`U`gg`Y`g`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`c`b]W`U`m`j`]U`Y`]h`Y`f`Hi`fb]h]b`c`f`U`A`cc`X`Y`
U`gg][`ba`Yb`h`i`h`]b`g`h`U`b`W`g`k` \Y`f`Y`h`l`g`]g`b`c`h`d`c`g`g]V`Y`z`]h`k`]`V`Y`g`h`U`h`X`c`b`mci`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`
U`h`Y`fb`U`h]`Y`gi`Va`]gg]cb`X`Y`h]g`"

:`c`f`]b`Z`c`f`a`U`h]c`b`c`b`l`c`k`hc`gi`Va`]h`U`gg][`ba`Yb`h`g`c`b`]b`Y`j`]U`A`cc`X`Y`.\`h`d`g`#`g`h`X`Y`b`h`i`bgk`"YXi`"Ui`#`c`k`!
gi`Va`]h`U`gg][`ba`Yb`h`a`cc`X`Y`"

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i`g]b[`h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[`h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`_`Y`a` `U`b`m`
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`h`Y` `W`X`Y`U`h]b[`h`c` `U`W`W`Y`X`Y`b`h`U` `m`i`W`c`d`m]b[`Z`c`a` `U`g`c`i`f`W` `k`]h`c`i`h`U`W`_`b`c`k` `Y`X[`Y`a` `Y`b`h`

I`B`G`K` `[`f`c`i`d`g`d`U[]Uf]ga `]b`h`c` `h`Y` `Z`c` `c`k`]b[`W`U`h`Y`[`c`f`]Y`g.

- 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 Yfmcby'j]b'h'Y'I BGK 'W'a a i b]m
- 'cW'W'h'gYfj]W'g'UbX'j]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 cghcZmci f'gh X]Yg'Uhl BGK ""

[\h'hd.##gi V'Y'W'i \]X'Y'g''j\]VfUfm'i b'gk "Y'X'i "U'i #' \]g'Y'#\]V'ci h' \]g'Y](#)

5 WUXYa]WbZcfa Uh]cb

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

- fYei Yghg`Zcf`YI H`bg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZY`mdc`]WYg/
- YI Ua]bUh]cb`dfcW`Xi fYg/
- gdYW]U`W`bg]XYfUh]cb`]b`hY`Yj Ybhcz]`bYgg`cf`a]gUXj Ybh fY/
- gh XYbhYei]m]UbX`X]gUV`]m/
- UbX`chYf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY

[\ftdg.#k k k "Uftg"i bgk "YXi "Ui #W ffYbh\]gh XYbh\]UWUXYa \]W\]bZcfa Uh\]cb#dfchW`g`\[i \]XY`\]bYg#](#)

⇒ U[Y`7fYX]h

D\chc`Vm>]VYfh9VfU\]a]`cb]_bgd`Ug\

7F ⇒ CG

7F ⇒ CG`Dfcj]XYf`7cXY.`\$\$\$- ;

5W_bck `YX[Ya Ybhcz7ci bhfm

K Y`UW_bck `YX[Y`hY`6YXY[U`dYcd`Y`k \c`UfY`hY`fUX]h]cbU`W`ghcX]Ubg`cZ`hY`UbXg`cb`k \]W`I BGK
? Ybg]b[`rcb`W]a`di`g`]g`cW]hYX"