

MINE8910

A]bY`K UHf`UbX`K UghY`A UbU[Ya Ybh

HYfa`Hk c`#`&\$&%

7ci fgY`Cj Yfj]Yk

GHJZ`7cbhJW`i8YHJ`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWjhcb	D\cbY
7Uf]rc`HUVY`jb	W`hUVY`jb4 i bgk "YXi "Ui	Hi YgXUmgž %*. \$\$!%+. \$\$	GW`cc`cZ A]bYfU`g`UbX 9bYf[m F Ygci fWg 9b[]bYYf]b[f&E`- ' ,) +- (*

GW`cc`c`7cbhJW`i`bZcfa Uh]cb

GW`cc`cZA]bYfU`g`UbX`9bYf[mF Ygci fWg
C`X`A U]b`6i]X]b[ž@Y] Y`%ž%) - `fP %) Ł
I BGK `GMBB9MBGK `&\$) &`5I GHF 5@5

7 ci fgY'8YHJ]`g

7 fYX]hDc]bng`*`

Gi a a UfmicZ\hY'7 ci fgY

A]bY'k UHYf'UbX'k UghY'a UbU[Ya YbhUFY'W]hW`]ggi Yg'Zcf'gUZ'UbX'YZ]W]Ybhi bXYf[fci bX'UbX'd]hia]b]b[cdYfU]cbg'UbX'hc'a]b]a]gY'Ybj]fcb a YbhU`]a dUWg'UhU`ghU[Yg'Zca 'ZYUg]V]]miUggYgga Ybhhc'a]bY Wcgi fY" @YUX]b['dfUW]Wg'Zcf'a]bY'g]fY'k UHYf'UW]ci bh]b['UbX'UggYgga Ybhk]`]bWi XY'XYdfYggi f]nU]cb UbX'XYk UHYf]b[ž [Ych'W]b]W]`ghUV]]mž gi ghU]bUV'Y'k UHYf'gi dd']Yg'UbX'gi fZJW'X]j Yfg]cbgžX]gWUf[Y'UbX di a d'gmg]Ya 'a UbU[Ya Ybh'

: i bXUa YbhU]g'cZ\mXfc[Yc'c[miUbX'\mXfc[YcW]Ya]ghfmZcf'a]b]b['k]`]bWi XY'a cb]hc]f]b['UbX a UbU[Ya YbhicZ[fci bXk UHYf'ghcfU[Yž'gU]b]miUbX'UW]X'a]bY'XfU]bU[Y/dch'bh]U'Wc'bhUa]bUbha] [fU]cb dfcW'ggYg/[YcW]Ya]W]`fYUW]j Y'fUbgdc]fha cXY`]b['UbX'fUW]b['a YhcXg" H\Y'Wci fgY'k]` ZcW'g'cb Uei Yci g'UgdYW]cZa]bY'k UHYf']bWi X]b['Yb[]bYYfYX'gYYdU[Y'VUff]Yfgžk UHYf'fYW]W]b['UbX'fYUha Ybh cd]cbgžk]h'Ub'cj Yfj]Yk 'cZk UghY'fcW'UbX'hU]]b[g'a UbU[Ya Ybh'

<ck 'a i W'h]a Y']g'fYei]fYX3

H\Y'Wci fgY']g'cZYfYX'Ug'U'X]ghUbW'Wci fgY'cj Yf'+k YY_g'cZ'YUfb]b['a cXi 'Yg'd'i g'UggYgga Ybhg!' h\Y a U'cf'dfc'YW]g'Xi Y'UZYf'h\Y'Wca d'Y]cb'cZ'YUfb]b['a cXi 'Yg" H\YfY'k]` VY'cbY'cb']bY`]j Y k YV]bUf'gW]YXi 'YX']b'h\Y'a]XX'Y'cZ\hY'Wci fgY'hc'Ub]gk Yf'ei Ygh]cbg'UVci h'h\Y'a U'cf'dfc'YW]` H\YfY'k]` VY'bc'ZJW!hc!ZJW'WUgg'cb'W]a di g"

h]g'fYWca a YbXYX'hUhUddfci]a UHY'm%) \$'\ci fg']g'fYei]fYX'Zcf'gU]gZJW'cfmdYfZcfa UbW']b'h]g'Wci fgYž XYdYbX]b['cb'VUW] [fci bX'UbX'YI dYf]YbW" h]g'h\Y'gh'XYbhg'fYgdc]bg]V]]m]hc'a UbU[Y'UbX'd'Ub

5ggYgga Ybh

H\Y'UggYgga YbhW]hYf]U'dfc] XY'U'ZfUa Yk cf_ 'Zcf'mci' hc'UggYgg'mci' f'ck b'k cf_ 'VYZcfY'Zcfa U'migi Va]h]b[a U'cf'Ugg][ba Yb]g'hc'mci' f'ZUW]hUhc'f'hc' f'ZUW]hUhc'f'k]''VY'i g]b['h]g'ZfUa Yk cf_ 'hc'UggYgg'mci' k cf_ 'UbX Ug'U'k Umhc'UggYgg'k \Yh\Yf'mci' \Uj Y'a Yh'h\Y''ghYX''YUfb]b['ci hW'a Yg'UbX'h\Y' [fUXi UhY'Uhf]Vi hYg'Zcf'mci' f'dfc[fUa "'5''gh XYb]g'UfY'YbW'e] fU[YX'hc'fU_Y'U'WcgYf'cc_'Uh'h]g'ZfUa Yk cf_ 'VYZcfY'ZXi f]b['UbX UZhf'W'a d'Yh]b['Ub'Ugg][ba Ybh'

H\Y'XYgW]dh]cbg]'b'h\Y'ZfUa Yk cf_ 'k]''\Y'd'mci' 'UbX'mci' f'ZUW]hUhc'f'hc']XYbh]Zmk \YfY'mci' f'Ugg][ba Ybh]g fUb_YX-'Zcfa 'Yi W''Ybh]c' d'ccf'UW]Yj Ya Ybh'K Y Ug_'hUh'mci' Xcb'hi gY'h\Y' [i]XY'bYg'Ug'U'WXYW_]ghZ Vi hUg'U'hc'c'hc'UggYgg'h\Y'ei U]m]cZ'mci' f'k cf_ "'Mci' f'ZUW]hUhc'f'k]''U'gc'VY''cc_]b['Uh'h\Y'ei U]m]z WYU]h]]mi'UbX'h\Y'dfYgYbh]h]cb'cZ'mci' f'k f]h]b'Ugg][ba YbhUg'h\Y'm]fYj]Yk'h\Y'ZfUa Yk cf_ "

5ggYgga YbhGi Va]gg]cbg

H\Y'GW'cc''\Ug'XYj Y'cdYX'U' [i]XY'bY'hc'\Y'd'mci' k \Yb'gi Va]h]b['U'W'e] fgY'Ugg][ba Ybh'D'YUgY'fU_Y'U WcgYf'cc_'Uh'U'h\YgY'XYU]g'cb'ci' f'k YVg]hY: [k k k "Yb\[\]bYYf\]b\["i bgk "YXi "Ui #a \]b\]b\[\] Yb\[\]bYYf\]b\[#Ugg\]\[ba Ybhgi Va \]gg\]cb!dc \]Wn](#)

K Y'YbW'e] fU[Y'mci' hc'fYU]b'U'W'c'mcZjY YfmUgg][ba Ybhgi Va]h]X'Zcf'UggYgga YbhZcf'mci' f'ck b'fYW'cFX Y]h\Yf]'b'\UfXW'c'mc'f'Y'YW'f'cb]WZcfa "'C b'U'fUfY'c'WUW]cbZ'Ugg][ba Yb]g'a UmVY'a]g'U]X'UbX'k Y'a Um W'c'bhUW'mci' hc'fY]gi Va]h]mci' f'Ugg][ba Ybh'

5''mci' f'Ugg][ba Ybh]g'k]''bYX'hc'\Uj Y'U'W'a d'Yh'X'D; 'W'c] Yfg'\Yh'hc'U'W'W'gg'U'W'c'dm]d'YUgY'j]g]h' \hd.##k k k "Yb[]bYYf]b["i bgk "YXi "Ui #a]b]b[] Yb[]bYYf]b[#g]h]g#a]bY#Z]Yg# d'cUXg#5gg][ba YbhW'c] Yfg'\Yh]bX]j]Xi U'SD: "dXZ

5ggYgga YbhHUg_g

5ggYgga YbhHUg_g	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hW'a Yg'5ggYggYX
C b]bY'ei]nnYg'UbX X]gW'gg]cb'VcUfX'	%)	&\$#\$, #&\$&%%) - 'DA	%ž'&ž'
A]bY'G]h'K UhYf'Zcfa Uh]cb'	&\$)	%- #+\$+#&\$&%%) - 'DA	%ž' &
: 'ck'UbX'A]]b['Dfc'YW'h	&))	\$- #\$, #&\$&%%) - 'DA	%ž' &ž' (
A U'cf'Dfc'YW'h	(\$)	&\$#\$, #&\$&%%) - '5A	%ž' &ž' ž' (

5ggYgga Ybh8YH]`g

5ggYgga Ybh% 'C b]bY'ei]nnYg'UbX'X]gW'gg]cb'VcUfX'

GhUfhXUH. '\$) #+\$+#&\$&%\$- . \$\$'5A

8YH]`g.

H\Y'cb]bY'X]gW'gg]cb'VcUfX']g'Ub'ja d'cf]UbhUj Ybi Y'Zcf'gh XYb]g'hc'g\UfY'h\Y]f'fYZYW]cbg]z'ei Ygh]cbg'UbX]bbYf'h]ci [\hg'UVci h'h\Y'j Uf]ci g'hc]d]W]g'X]gW'ggYX Xi f]b['h\Y'k YY_'H\Y'mk]''U'gc'\Uj Y'h\Y'c'dd'c'f]b]m]hc' W'a a Ybh]cb'h\Y]f'WUgga Uh]g']XYUg'UbX'dc]b]g'cZj]Yk "'H\Y' [cU'cZ'h]g'UW]j]m]g'hc' YbW'e] fU[Y'h\Y

g\Uf]b['cZ]XYUgžXYj Y'cd'W]hW'`h]b_]b[žZYI]V]]mUbX'cdYb!a]bXYXbYgg"

5ggYgga Ybh&. 'A]bY'G]hY'K UHf'`bZcfa Uh]cb

GHUfhXUH. ' %#\$) #&\$&%\$- .\$\$'5A

8YHU]`g.5`WUgY`gh XmfYdcfhg\ck]b['k UHf'a UbU[Ya Ybh]b`U'gY`YVW`X'a]bY'g]hY']b`5i gfu`]U"

5ggYgga Ybh' .: `ck `UbX`A]l]b[`Dfc`YWh

GHUfhXUH. ' %#\$) #&\$&%\$- .\$\$'5A

8YHU]`g.H\]g`dfc`YWh]bWl Yf]g ['k UHf'a UbU[YZ\$ %o

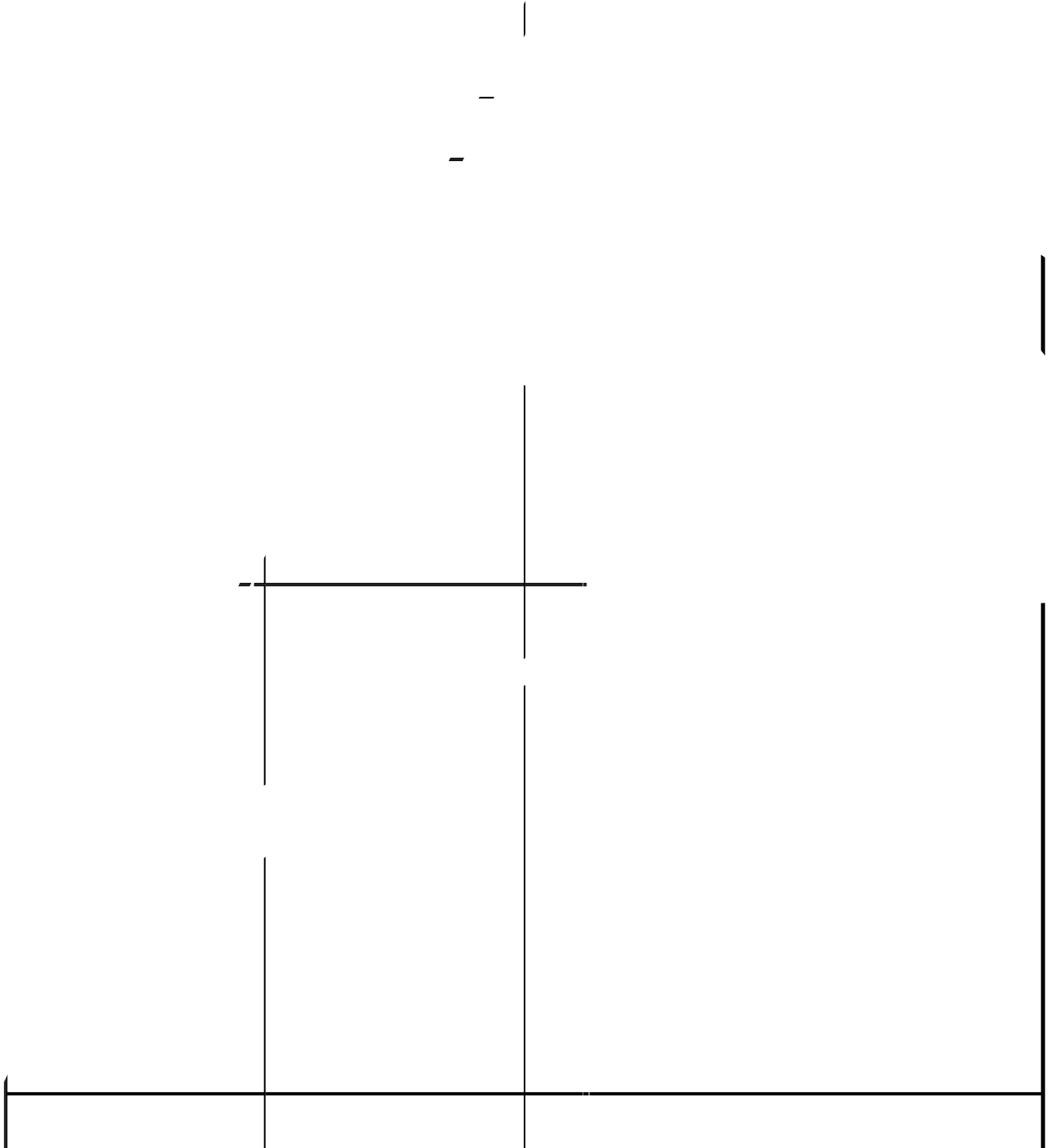
- cb`]bY`)
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- ; fci bXk UHyf
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7ci fgY'9j U'i Uh]cb'UbX'8Yj Y`cda Ybh

5hH\Y'YbX'cZYUW\`Wci fgYžU`ghi XYbhg'k]`Uj Y`hY'cddcfh b]mhc`Wca d`YH'U`Wci fgY'Yj U'i Uh]cb'Zcfa "
H\YgY'Ubcma ci g'gi fj Ymg`Y'd'i g'i bXYfgHUbX'mci f'j]Yk g'cZhY'Wci fgYžmci f`YWhi fYfg'UbX'hY'Wci fgY
a UH'f]U'g"K Y'UFY'Wcb]bi ci g'm]a d'fcj]b[`ci f`Wci fgYg'VUgYX'cb'ghi XYbhZYXVUW`žUbX'mci f'dYfgdYWhj Y
]g'j U'i UV`Y"

K Y'U'gc'YbWci fU[Y'U`ghi XYbhg'hc'g\UFY'UbmZYXVUW`hYm\Uj Y'Ubm]ja Y`Xi f]b[`hY'Wci fgY'—']Zmci
\Uj Y'U'WcbW'fbžd`YUgY'WcbHWhi g'ja a YX]UH'`m'

@UVcfUhc'fmK cf_g\cd'`bZcfa Uh]cb

H\]g'Wci fgY'\Ug'bc`UVcfUhc'fmWca dcbYbhic']h'

- I BGK '@YUfb]b['7YbfY!' [k k k "Wi bgk "YXi "Ui](#)
- 7 ci bgY``b['gi ddcfh! [k k k "Wti bgY``\]b\["i bgk "YXi "Ui](#)

9ei]HUV`Y`@YUfb]b['GYfj]Wg

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

Mci f`YWh fYf`UbX`hY`l b]j Yfg]mi k]`Yl dYWhmci f`gi Va]hYX`Ugg][ba Ybht`UfY`hfi`mimci f`ck b`k cf`"l BGK
`Ug`j YfmWYUf`[i]XY`bYg`cb`k `Uhd`U[]Uf]ga]g`UbX`ck`hc`Uj`c]X`h`D`U[]Uf]ga]g`i`g]b[`hY`k`cfXg`cf
]XYUg`cZchYfg`UbX`dfYgYb]b[`hYa`Ug`mci f`ck b`"D`U[]Uf]ga]g`U`mdY`cZ]b]h`YWh U`hY`Z`h`W]b`hU`Y
a UbmZcfa gZ`Zca`XY`]VYfU`h`W`Y`U`h]b[`hc`UW]XYb]U`miW`dm]b[`Zca`U`gci fW`k]hci hUW`bck`YX[Ya Yb]h
H`Y`l b]j Yfg]mi`Ug`UXcdhX`Ub`YXi W]h] Y`UddfcUW`hc`d`U[]Uf]ga`UbX`Ug`XYj Y`cdYX`U`fUb[Y`cZ
fYgci fW`g`hc`gi ddcf]h] XYb]h]"5`"hY`XYhU]g`cb`d`U[]Uf]ga ž]bWi X]b[`gca Y`i`gY`Z`"fYgci fW`gZ`W]b`VY
Zci bX`Uh]k`k`k`"gh`XYb]h]`bgk`"YXi`"Ui`#`U[]Uf]ga`

5 WUXYa]W#Zcfa Uh]cb

7 ci fgY`F Ygi `hg

: cf`XYHU]g`cb`l BGK `UggYgga Ybhd`Wzd`YUgY`j]g]h [k k k "gh XYbhi bgk "YXi "Ui #UggYgga Ybh](#)

#`gca Y`]bghUbWg`mci f`Z]bU`Wci fgY`fYgi `ha UmVY`k]H\Y`X`UbX`bchfY`YUgYX`cb`hY`l BGK `d`UbbYX`XUH`" H\]g`]g`]bX]WUHX`VmU`Wci fgY`[fUXY`fYgi `hcZY]hYf.

- VfcUXVUbX`WcbbYWjcb`f&) *`_V]hgYWcf`ZJghYfŁ
- UV]`]mhc`j`Yk`ghfYUa`]b`[`j`XYc`fŁ][`\\`cf`ck`XYZ]b]hcb`I`BGK`HJ`cdh]cbgŁ

A cfY`]bZcfa`Uhcb`UVci`hgmgH`a`fYei`]fYa`Ybhtg`]g`Uj`U]UV`Y
[Uhi k k "ghi XYbhi bgk "YXi "Ui #a ccX`Y!gmghYa`lfYei`\]fYa`Ybhtg](#)

5VWYgg]b[`7ci fgY`A`UHf]U`g`H\fcI [`A`ccX`Y

7ci fgY`ci`h]bYgžgi`ddcfha`UHf]U`g`UFY`i`d`cUXYX`hc`A`ccX`YžhY`i`b]j`Yfg]mghUbxUfX`@YUfb]b[
 A`UbU[`Ya`YbhGmgH`a`f@a`GŁ`#`UXX]hcbž`cb!`]bY`Ugg][`ba`Ybhgi`Va`]gg]cbg`UFY`a`UXY`i`g]b[`hY`
 Ugg][`ba`YbhXfcdVcl`ZUW]`]midfcj`]YX`]b`A`ccX`Y`5`Ybfc`YX`gh`XYbhtg`UFY`Ui`hca`UH`W`m]bW]`YX`]b`
 A`ccX`Y`Zcf`YUW`Wc`i`fgY`Hc`UWVY`gg`hY`gY`XcW`a`Ybhtg`UbX`chYf`Wc`i`fgY`fYgci`fW`gž`d`YUgY`j`]g]h`
[k k k "a ccX`Y`h`h`i`bgk`"YXi`"Ui`](#)

<ck`K`Y`7`cbhUWh`Mci

5hi]a`YgžhY`GW`cc`cf`mci`f`Wc`i`fgY`Wc`bj`Ybcfg`a`UmbYYX`hc`Wc`bhUWh`mci`UVci`hmc`i`f`Wc`i`fgY`cf`mci`f`
 Ybfc`a`Ybh`Mci`f`Wc`i`fgY`Wc`bj`Ybcfg`k`]`i`gY`hY`Ya`U]`Z`bW]cb`k`]h]b`A`ccX`Y`cf`k`Y`k`]`Wc`bhUWh`mci`cb`
 mci`f`4`gh`XYbhi`bgk`"YXi`"Ui`Ya`U]`UXXfYgg"

K`Y`i`bXYfghUbx`h`Uhmc`i`a`Um`Uj`Y`Ub`YI`]gh]b[`Ya`U]`UW`Wc`i`bhUbx`k`ci`X`dfYZf`Zcf`mci`f`I`BGK`Ya`U]g`hc`
 VY`fYX]fYWYX`hc`mci`f`dfYZf`fYX`UW`Wc`i`bh`D`YUgY`gYY`]bg]h`i`W]cbg`cb`ck`hc`fYX]fYW`mci`f`I`BGK`
 Ya`U]g`"[<ck`WUb`=Zcfk`UfX`a`mYa`U\]g`hc`Ubc`hYf`UW`Wc`i`bf3"](#)

<ck`Mci`7`Ub`7`cbhUWh`I`g

K`Y`UFY`U`k`Umg`fYUXmhc`Ugg]ghmci`k`]h`mci`f`]bei`]f]Yg`Hc`Ybgi`fY`mci`f`ei`Ygh]cb`]g`X]fYWYX`hc`hY`Wc`ffYWh`
 dYfgcbž`d`YUgY`i`gY`hY`Ya`U]`UXXfYgg`VY`ck`Zcf.

- 9bfc`a`Ybhcf`chYf`UXa`]b`ei`Ygh]cbg`fY`UfX]b[`mci`f`dfc`[`fUa`.
[\hdg.##`bgk`\]bg\]\[`h`a`WcgcZ`W`a`dcffU`g`W`a`#`YV!Zcfa`g#](#)
- 7ci fgY`]bei`]f]Yg`g\ci`X`VY`X]fYWYX`hc`hY`7`ci`fgY`7`cbj`Ybcf`

⇒ U[`Y`7`fYX]h

I`BGK`GMBB9M

7F`⇒`CG

7F`⇒`CG`Dfcj`]XYf`7`cXY`.\$\$\$`-`,`;

5W_bck`YX[Ya YbhcZ7ci blfm

5ddYbX|l . '9b[]bYYfg'5i ghfU`U'f95Ł'DfcZYgg]cbU`'9b[]bYYf'7ca dYhYbWm
GHUbXUfX

Dfc[fUa 'bHYbXYX'@YUfb]b['Ci hWta Yg	
? bck `YX[Y'UbX'g_]`VUgY	
D9%"%7 ca dfY\Ybg]j YžhYcfmVUgYX'i bXYfghUbX]b['cZhY'i bXYfd]bb]b['bUh fU`UbX d\mg]WU`gWYbWg'UbX'hY'Yb[]bYYf]b['Z bXUa YbHU'g'Udd']WUV'Y'hc'hY'Yb[]bYYf]b['X]gWd`]bY	
D9%"&'7 cbWdh U`i bXYfghUbX]b['cZhY'a UhYa Uh]Wgžbi a Yf]WU`UbU'mg]gžghUhgh]WgžUbX Wta di hYf'UbX']bZcfa Uh]cb'gWYbWg'k \]W' i bXYfd]b'hY'Yb[]bYYf]b['X]gWd`]bY	
D9%" " 'b!XYdh'i bXYfghUbX]b['cZgdYWU']ghVcX]Yg'cZ_bck `YX[Y'k]h]b'hY'Yb[]bYYf]b[X]gWd`]bY	
D9%"('8]gWfba YbhcZ_bck `YX[Y'XYj Y`cda YbhUbX'fYgYUfW'X]fYW]cbg'k]h]b'hY Yb[]bYYf]b['X]gWd`]bY	
D9%") ? bck `YX[Y'cZYb[]bYYf]b['XYg][b'dfUW]W'UbX'WcbHYI h U`ZUW'c'fg]a dUW]b['hY Yb[]bYYf]b['X]gWd`]bY	
D9%"* 'i bXYfghUbX]b['cZhY'gWc'dYždf]bWd`Ygžbcfa gžUW'ci bHUJ']h]Yg'UbX'Vci bXg'cZ gi gh]bUV'Y'Yb[]bYYf]b['dfUW]W']b'hY'gdYW]ZWX]gWd`]bY	
9b[]bYYf]b['Udd']WU]h]cb'UV']]m	
D9%"%5dd`]WU]h]cb'cZYghUV']g\YX'Yb[]bYYf]b['a Yh'cXg'hc'Wta d'YI'Yb[]bYYf]b['dfcV'Ya gc']]b[
D9%"&'&'i YbhUdd']WU]h]cb'cZYb[]bYYf]b['hYW]b]ei Ygžhc'c'g'UbX'fYgci fW'g	
D9%" " '5dd`]WU]h]cb'cZgmg]Ya Uh]WYb[]bYYf]b['gmbhYg]g'UbX'XYg][b'dfcW'ggYg	
D9%"('5dd`]WU]h]cb'cZgmg]Ya Uh]WUddfcUW]Yg'hc'hY'WcbXi W]UbX'a UbU[Ya YbhcZYb[]bYYf]b[dfc'YW'g	
DfcZYgg]cbU`UbX'dYfgcbU`Uhf]Vi hYg	
D9' "%9h]WU`WcbXi W]UbX'dfcZYgg]cbU`UW'ci bHUJ']]m	
D9' "&'9ZYW]j Y'cfU`UbX'k f]hYb'Wta a i b]WU]h]cb']b'dfcZYgg]cbU`UbX`UmXca U]bg	
D9' " '7fYUh]j Yž]bbcj Uh]j Y'UbX'dfc!UW]j Y'XYa YUbcif	
D9' "('DfcZYgg]cbU`i gY'UbX'a UbU[Ya YbhcZ]bZcfa Uh]cb	
D9' ") 'CfXYfma UbU[Ya YbhcZgY'ž'UbX'dfcZYgg]cbU`WcbXi W]	
D9' "*" '9ZYW]j Y'hYUa 'a Ya VYfg\]d'UbX'hYUa 'YUXYfg\]d	

