

ARTS3667

HYUWX]b['? cFYUb'Ug'U': cFY][b'@Ub[i U[Y

HYfa 'Hk c' #'&\$%

7ci fgY`Cj Yfj]Yk

`GHUZZ7cbhUW`i8YHU]`g`

`7cbj Ybcfg`

B Ua Y	9a U]	5j U]UV]]m	@cWU]cb	D\cbY
;]!<mi b`G\]b	["g\]b4 i bgk "YXi "Ui	H"6"5"	F cca `&\$& A cfj Yb`6fck b 6i]X]b[- ' ,) `%+ ' %

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GWXcc``cZ<i a Ub]h]Yg`UbX`@Ub[i U[Yg

@cWU]cb. `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

D\cbY. `ž`*%&`- ' ,) `%* , %

: U! . `ž`*%&`- ' ,) `; , +\$)

9a U]: [\U`4 i bgk "YXi "Ui](#)

7ci fgY'8YHJ]`g

7fYX]hDc]bhr`*`

Gi a a UfmicZh\Y'7ci fgY

Gi VYWhi5fYU.`=adMS` E fgV[Wé

9I d'cfYg`]ggi Yg'fY'Uh]b[`hc`hYUWX]b[`? cfYUb'Ug'U': cfY][b'@Ub[i U[Y": cW'gYg'cb`)]b[i]gh]WUbx
gcW]cW`hi fU`WébhYbhiUg`k Y`Ug'a Yh\cXc`c[]WU`UgdYWg`cZHYUWX]b[`? cfYUb'Ug'U': cfY][b'@Ub[i U[Y"

7ci fgY'@YUfb]b[`Ci hWéa Yg

%` ÆYbh]ZmiUbx'Udd'mgdYWU`]gYX'? cfYUb`Ub[i U[Y`hc`h\Y`hYUWX]b[`UbX`YUfb]b[`cZU`ZcFY][b
`Ub[i U[Y
&" 9I d'U]b`VUg]WwébVW`dhr`UbX`]ggi Yg'fY'Uh]b[`hc`hYUWX]b[`? cfYUb'Ug'U': cfY][b'@Ub[i U[Y
' " 7f]h]WU`mfYZYVhcb`dYfgcbU`YUfb]b[`hc`]XYbh]ZmihY`_bck`YX[Y'UbX`i bXYfgtUbx]b[`cZHYUWX]b[
? cfYUb'Ug'U': cfY][b'@Ub[i U[Y
(" ÆYbh]ZmigtUhr[]Yg`]b`hYUWX]b[`? cfYUb`]b`U`ZcFY][b`Ub[i U[Y`WUggfcca
) " ÆYbh]ZmiUbx'X]gW`gg`]ggi Yg`UbX`WX`U`Yb[Yg`]b`hYUWX]b[`? cfYUb'Ug'U': cfY][b'@Ub[i U[Y`]b
5i`ghU`]U

HYUWX]b[`GhfUhr[]Yg`

D`YUgY`fYZYf`hc`h\Y`]bZcfa Uh]cb`]b`A ccX`Y

5ggYgga Ybh

5ggYgga YbhHUg_g`

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
E i]nnYg`	(\$i	Bch5dd`]WUV`Y	%ž&
DfYgYbhU]cb`	' \$i	Bch5dd`]WUV`Y	' ž(ž)
F YgYUfW`Dfc`YVh	' \$i	Bch5dd`]WUV`Y	' ž(ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh%`E i]nnYg

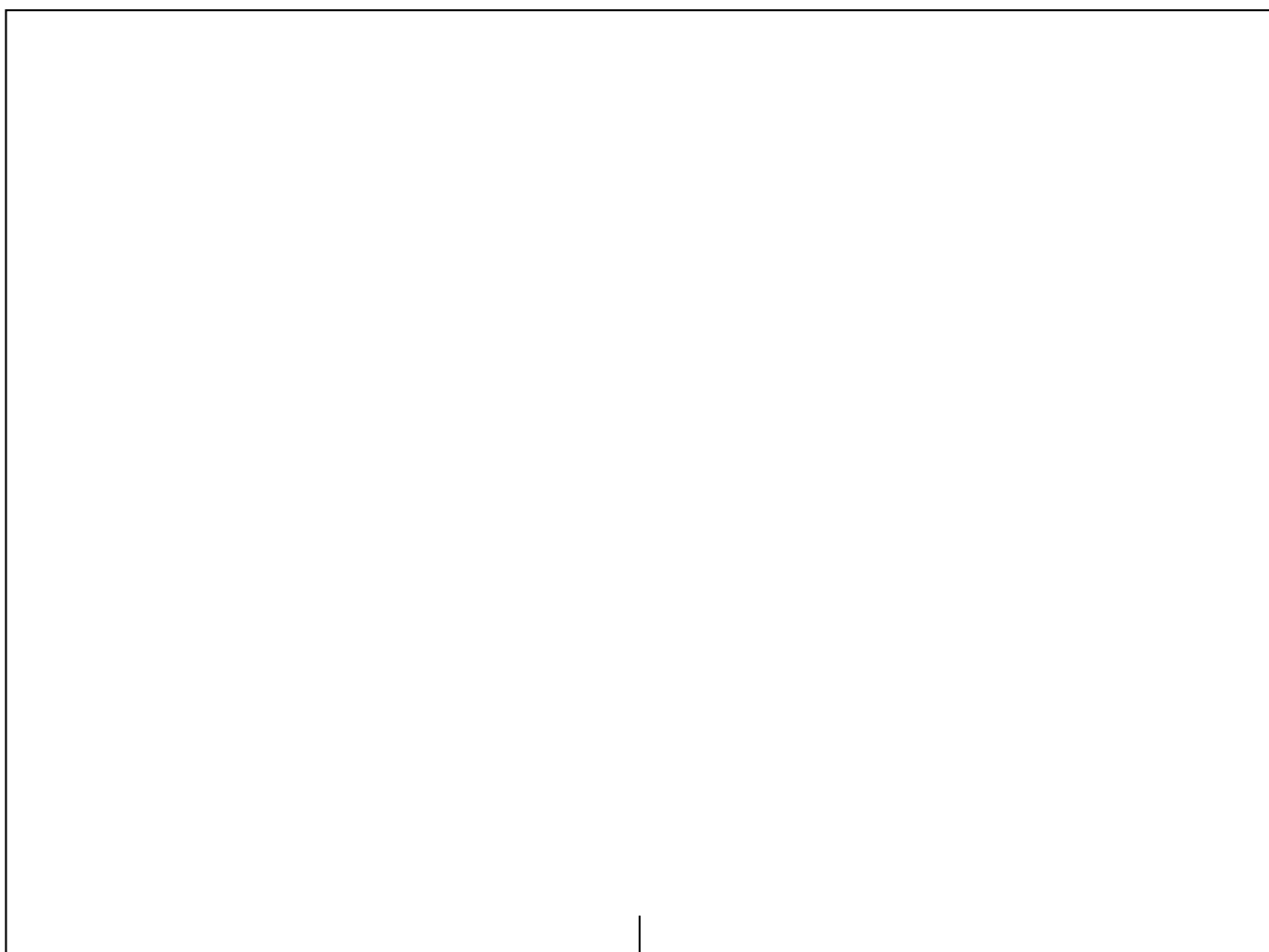
GHUfhXUH. `Bch5dd`]WUV`Y

@Yb[h. `(45]nnYg`UW`
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8YHU]g. `&l () `a]b`ei]nnYg""G\cfhUbgk Yf`ei Yghcbgž`UggYgg]b[`mci f`_bck `YX[Y`UVci hUbX`WUdUV`]`mcZ
YI d`U]b]b[`]b`?cfYUb`VUg]WUcbWYd %o

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

8i Y`XUH`rc`VY`XYWjYX`h]fci [\ `WUgg`X]gW`gg]cb"



F Ygci fWg

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⊕!\ci gY`fYUX]b[`a UHf]U`g`k]`VY`Uj U]UV`Y`tc`gh XYbhg

F YWca a YbXYX`F Ygci fWg

G\]bžG!7" f&\$%+Ł"! bXYfghUbX]b[`@&? cfYUb`@YUfbYf`9ffcfg.`8YgWf]dh]cbž9I d`UbUh]cb`UbX`a d`]W]h]cbg"
GYci`.Gc]cb["

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

⊕Zc`a U`X]gW]gg]cbg`k]h`gh XYbhg`Ug`tc`\ck`h\Y`Wci fgY`dfc[fYggYg`UFY`U`k Umg`cdYb"5`gcž]a dcf]Ubh]g
h\Y`Zcfa U`Wci fgY`Yj U`i Uh]cb`YI YW`h\X`Vm\h\Y`i b]j Yfg]mUh\h\Y`WcbWU]h`V`

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

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≠mci`YbWci bhYf`U`dfcV`Ya`k`Yb`U`H`Ya`dh]b[`h`c`gi`Va`]h`m`c`i`f`U`g`g`[`ba`Y`b`h`h`f`c`i`[`\`H`i`f`b`]h]b`z`d`Y`U`g`Y`
H`Y`d`\`c`b`Y`9`I`H`f`b`U``G`i`d`d`c`f`h`c`b`-`,`),`"`,`"`,`"`,`%`c`f`Y`a`U`]`h`Y`a``c`b`Y`I`H`f`b`U`H`Y`h`g`i`d`d`c`f`h`4`i`b`g`k`"Y`X`i`"U`i`"Gi`d`d`c`f`h`
\`c`i`f`g`U`f`Y`,`.\$`\$`U`a`-`-%`\$`.\$`\$`d`a``c`b`k`Y`Y`_`X`U`m`g`U`b`X`-`.\$`\$`U`a`-`i`).`\$`\$`d`a``c`b`k`Y`Y`_`Y`b`X`g`f`l`*)`X`U`m`g`U`m`Y`U`f`l`"≠mci`
U`f`Y`i`b`U`V`Y`h`c`gi`Va`]h`m`c`i`f`U`g`g`[`ba`Y`b`h`X`i`Y`h`c`U`Z`U`i`h`k`]h`H`i`f`b`]h]b`m`c`i`a`U`m`i`U`d`d`m`i`Z`c`f`U`b`Y`I`H`f`b`g`]c`b`z`V`i`h`m`c`i`
a`i`g`h`f`Y`h`U`]b`m`c`i`f`h]W`Y`h`b`i`a`V`Y`f`Z`c`a`9`I`H`f`b`U``G`i`d`d`c`f`h`f`U`c`b[`k`]h`U`b`m`c`h`Y`f`f`Y`j`U`b`h`X`c`W`a`Y`b`h`g`k`h`c`
]b`W`i`X`Y`U`g`Y`j`]X`Y`b`W`h`c`gi`d`d`c`f`h`m`c`i`f`Y`I`H`f`b`g`]c`b`U`d`d`]W`h]c`b`"≠mci`Y`a`U`]`9`I`H`f`b`U``G`i`d`d`c`f`h`m`c`i`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 gZ`Zca `XY`]VYfUHY`WXYU]b[`hc`UWV]XYbhU`mW`dm]b[`Zca `U`gci fW`k]h`ci hUW_bck`YX[Ya Ybh`

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

7 cdm]b[.`i g]b[`hY`gUa Y`cf`j Yfmg]a]Uf`k cfXg`hc`hY`cf][]bU`hYI hcf]XYU`k]h`ci hUW_bck`YX[]b[`hY`
gci fW`cf`i g]b[`ei chU]cb`a Uf_g" `H\]g`U`gc`Udd`]Yg`hc`]a U[YgZ`UfhUbX`XYg][b`dfc`YWgZ`Ug`k Y`Ug
dfYgYbhU]cbg`k \YfY`gca YcbY`dfYgYbh]g`UbchYf`g]XYUg`cf`k cfXg`k]h`ci hWYX]h`

hUddfcdf]UHY`dUfUd`fUg]b[.`7`Ub[]b[`U`ZYk `k cfXg`UbX`d`fUgYg`k \]Y`a cghmiFYhU]b]b[`hY`cf][]bU`
ghfi W`i fY`UbX`#`f`dfc[fYgg]cb`cZ]XYUg`cZ`hY`cf][]bU`Z`UbX`]bZcfa U]cb`k]h`ci hUW_bck`YX[Ya Ybh`H\]g`U`gc
Udd`]Yg`]b`dfYgYbhU]cbg`k \YfY`gca YcbY`dUfUd`fUgYg`UbchYf`g]XYUg`cf`k cfXg`k]h`ci hWYX]hU`bX`hc
d]YW]b[`hc[YhYf`ei chYg`UbX`dUfUd`fUgYg`]bhc`U`bYk `k \c`Yz`k]h`ci hUddfcdf]UHY`fYZYfYbW]b["

7 c`i g]cb.`k cf_]b[`k]h`chYfg`Vi hdUgg]b[`cZ`hY`k cf_]Ug`U`dYfgcb`g`]bX]j]Xi U`k cf_]7 c`i g]cb`U`gc
]bWi XYg`dfcj]X]b[`mci f`k cf_]hc`UbchYf`gh`XYbhVYZc`fY`hY`Xi Y`XUHY`Zc`f`Zc`hY`di fdcgY`cZ`hY`a

- i bXYfghUjX'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'UjX'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZ'Y'ghUjX'UfX'g'cZVY\Uj]ci f'YI dY'W'X'cZYj Yfmc'bY']b'h'Y'I BGK 'W'a a i b]m
- `cW'Uj'gYfj]W'g'UbX']bZ'c'fa U]cb'UVci hi 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 bXYfghUjX]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'c. #g\] V'Y'W'f i \]X'Y'g" \]V'f'U'f'm'i b'g'k "Y'X'i "U'i #'\]g'Y'#\]V'c'i h'Y' \]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`midc`]WYg/

