

A Uf_hUb hY]`ghY][h'i a '' i 'VY]'[`cVU`Yb
? fmdhc!5ggYhg' 'A Uf_hU_hi U`]g]Yfi b[Yb

GY]h'XYa '' %"8YnYa VYf'&\$&`\Uh'X]Y'A Uf_hXca]bUbn'j cb
9h\YfYi a 'i bhYf'XYb'HUi gYbXYb'j cb '? fmdhc!5ggYhg'k Y'hk Y]h
i a 'a Y\ f'U`g'' i 'ni [Ybca a Ybž'X]Y'Ua '%"'łJbi Uf'&\$&' 'Ui Z
fi bX',) * 'A]`]UfXYb'! G!8c`Uf'[YgW\Àhnh'k i fXYb'Wc]b

A Uf_h_Ud]hU`]g]Yfi b[g!5[[fY[Uh]cbggY]hY`gh]Y['X]Y
8ca]bUbn'XYg'? fmdhc!A Uf_hYg'j cb'9h\YfYi a 'j cb'%, ž('i
Ui Z'gY]bY'U_hi Y`Y'8ca]bUbnVYk Yfhi b['j cb'%- 'i "'8Yf
A Uf_hUb hY]'j cb'9h\YfYi a 'k ÀW\gh]ba]hhYb'XYg'fUgYbXYb
5bgh]Y[g'XYf'? fmdhc k À\fi b[ga Āf_hY'9h\YfYi a 'f9H< ŁXUg
nk Y]h[f0» hY '? fmdhc!A Uf_hj Yfa 0[Yb' bUW\

A Uf_h_Ud]hU`]g]Yfi b[ž\Uh]b'XYb'YhnhYb'%%'HU[Yb'Y]bY
Ni bU\ a Y'gY]bYf'A Uf_hXca]bUbn'Yf'YVh"'9H< '_cbbhY
[Y[Yb0VYf'XYa '! G!8c`Uf'ni `Y[Yb'i bX'gh]Y['Ua 'YhnhYb
HU['i a 'Yhk U'\$ž(, 'i "'G]YVYb!HU[Y!A Yhf]_Yb'nY][Ybž'XUgg
9h\YfYi a ' / Ua d^Y`]d/

GY]h`XYa " %"8YnYa VYf`&\$&&`\Uh`X]Y`A Uf_hXca]bUbn`j cb
9h\YfYi a `i bhYf`XYb`HUi gYbXYb`j cb`? fmdhc!5ggYhg
k Y`hk Y]hi a `a Y\`f`U`g`' i `ni [Ybca a Ybž`X]Y`Ua `%%"
>Ubi Uf`&\$&`' `Ui Z`fi bX` ,) * `A]``UfXYb`I G!8c``Uf`[YgW`Àhnh
k i fXYb`W`]b`A Uf_h_Ud]hU`]g]Yfi b[g!5 [[fY[Uh]cbggY]hY
gh]Y[`X]Y`8ca]bUbn`XYg`? fmdhc!A Uf_hYg`j cb`9h\YfYi a
j cb`%, ž(`i `Ui Z`gY]bY`U_hi Y``Y`8ca]bUbnVYk Yfhi b[`j cb
%- `i "

8 Yf`A Uf_hUbhY]`j cb`9h\YfYi a `k `ÀW`gh
]ba]hhYb`XYg`fUgYbXYb`5bgh]Y[g`XYf
? fmdhc k `À\`fi b[ga `Àf_hY

9h\YfYi a `f9H< ŁXUg`nk Y]h[f0» hY`? fmdhc!A Uf_hj`Yfa 0[Yb`bUW`
A Uf_h_Ud]hU`]g]Yfi b[ž`\Uh`]b`XYb``YhnhYb`%%`HU[Yb`Y]bY`Ni bU\`a Y
gY]bYf`A Uf_hXca]bUbn`Yf`YVh`"9H< `_cbbhY`[Y[Yb0VYf`XYa `I G!
8c``Uf`ni `Y[Yb`i bX`gh]Y[`Ua ``YhnhYb`HU[`i a `Yhk U`\$ž(, `i ``G]YVYb!
HU[Y!A Yhf]_Yb`nY][Ybž`XUgg`9h\YfYi a `[Y[Yb0VYf`XYa
; fYYbVUW`_i a `*ž)) `i `[Ygh]Y[Yb`]gh"

: Øf'9h\Yfyi a 'i bX'U`Y'UbXYfYb'? fmdhc!5ggYhg'k]fX'X]Y
A Uf_hVY\YffgW\i b['VYfYW\byhž]bXYa 'X]Y'A Uf_h_Ud]hU']g]Yfi b [
X]j]X]Yfh'k]fX'9H< 'Xi fW\X]Y' [YgUa hY'A Uf_h_Ud]hU']g]Yfi b['U`Yf
? fmdhc k Å\fi b[Yb'ni gUa a Yb'"GhUbX.' ' %"8YnYa VYf'&\$&&ž
? Yb'bnU\`Yb'j cb'W\]ba Uf_YhWUd"W\ca 'f7A 7Ł"UfW\ Jj]Yfh'Ui Z
UfW\Jj Y"cf['k Y]gYb'XUfUi Z\]b'ÿ h\ Yf'f9H< Ł'\UhY'Y]bY
A Uf_hXca]bUbnVYk Yfhi b['j cb'fi bX'% , ž('i 'i bX'X]Y' [YgUa hY
? fmdhc Ö_cbca]Y'k i fXY'Ui Z+- *ž- %A]`]UfXYb'! G!8c`Uf
[YgW\Åhnh"

8 UhYb'j ca '%%"Δ]bi Uf'&\$&' žnY][h'Ub'9H< 8]Y'8ca]bUbn'j cb
'Y[h'ibi b'VY]'%- 'i 'i bhYf'XYb'&&'&*&%'? fmdhc!5ggYhgž'X]Y'Ui Z'7A 7
[Y']ghYh'g]bX'i bX'Y]bYb'K Yfh'j cb'fi bX',) *'A]`]UfXYb'! G!8c`Uf
\UVYb'"@Ui h'W\]b[YW_c"W\ca 'f7; Ł'Ui Z' %"8YnYa VYf'&\$&&ž'9H<
8]Y'8ca]bUbn'j cb'VYhfi ['fi bX'%+ž('i 'i bX'X]Y' [YgUa hY
? fmdhc Ö_cbca]Y'\UhY'Y]bYb'K Yfh'j cb', &, 'A]`]UfXYb'! G!8c`Uf"
9g']gh'k]W'h['ni 'VYUW\hYbž'XUgg'X]Y'A Yhf]_Yb'j cb'7; 'UbXYfg'g]bX
U'g'X]Y'j cb'7A 7ž'XYfnY]h'7; !G\ck g'8]Y'8ca]bUbn'j cb
9h\Yfyi a ``]Y[h'VY]'%, 'i "'7A 7'nY][h'9h\Yfyi a g'f9H< Ł'\Uh'X]Y
8ca]bUbnVYk Yfhi b['i a '' ž&*'i 'ni [Ybca a Ybž'i bX'`Ui h'7;
VYhfi ['XYf'5bgh]Y['ž('i "

6Y]XY'W\]b'K YVg]hYg'ni f'Ni gUa a YbZUggi b['j cb
A Uf_h_Ud]hU']g]Yfi b[Yb'nY][Yb'X]Yg'6]hW\]b'f6H7Ł'8]Y'8ca]bUbn
\Uh'UV[Ybca a Yb'"7A 7!A Yhf]_Yb'k Y]gYb'XUfUi Z\]b'6]hW\]b'8]Y
8ca]bUbn'j cb']gh]b'XYb'`YhnhYb'%%HU[Yb'j cb'(\$'i 'Ui Z' -ž&'i
[Ygi b_Yb'"K Å\fybX'7; !GhU]gh]_Yb'nY][Yb'6]hW\]b'8]Y
8ca]bUbnVYk Yfhi b['j cb'9h\Yfyi a 'Ui Z'X]YgYf'K YVg]hY'VYhfi [, ž)
'i 'i bX'`Y[h'ibi b'Ua '%%"Δ]bi Uf'&\$&' VY]' +ž*'i "'8]Y
A Uf_hXca]bUbn'j cb'9h\Yfyi a '\Uh]b'XYb'`YhnhYb'HU[Yb'ghYh][
ni [Ybca a Ybž'k]Y'VY]XY'? fmdhca Uf_h!5 [[fY[Uh]cbg!K YVg]hYg
nY][Ybž'XUgg'X]Yg'XYf': U``]gh"8Yf'HfYbX'XYf'UVbY\ a YbXYb
8ca]bUbn'j cb'6]hW\]b']gh'Ui W\]b'XYb'j cb'VY]XYb'K YVg]hYg
VYfY]h[YghY`hYb'8 UhYb' _cbg]ghYb'h"

K Ug'XYb_Yb'G]Y'ØVYf'X]Y'ni bY\ a YbXY'A Uf_hXca]bUbn
j cb'9h\Yfyi a 'j]b'XYf'? fmdhc]bXi ghf]Y'j]b'XYb'`YhnhYb'%%
HU[Yb'3'K]Y'gY\Yb'G]Y'X]YgYb'HfYbX'j]b'XYf'Ni _i bZh3

@UggYb`G]Y`Yg`i`bg`]a`?`ca`a`YbhUfVYfY]W`i`bhYb`k`]ggYb`"

ΔJa`]Y`FYXa`Ub`

ΔJa`]Y`FYXa`Ub`]gh`XYf`B`UW`f]W`hYb`Y`hYf`VY`]6]hWc`]b`Wc`a`BYk`g`i`bX`Y]b`]b`:]`cf]XU`
`YVYbXYf`∞i`fbU`]gh`Z0f`:]bUbnhYW`bc`c`[`]Y`FYXa`Ub`]gh`gY]h`&\$\$%`U`hj`Yg`A`]h`YX`
XYf`?`fmdhck`A`fi`b`[`g!`7ca`a`i`b]hm`9f`U`h`Y]bY`@Y]XYbgW`UZh`Z0f`6]hWc`]b`ž`C`dYb!Gci`fW`!
7cXY`i`bX`X`Y`nY`b`h`f`U`Y`5bk`Y`b`Xi`b`[`Yb`"GY]h`GY`dhYa`VYf`&\$\$%`U`h`FYXa`Ub`a`Y`f`U`g`
*`"\$`\$`\$`5fh]_Y`Z0f`6]hWc`]b`Wc`a`BYk`g`ØVYf`X]Y`Y`i`hY`Ui`Z`_ca`a`YbXYb`X]gfi`dh]j`Yb`
Dfchc`_c`Y`[`YgW`f]YVYb`"

6]`X`b`UW`k`Y]g.`G`i`hhYfghc`W`ž`D]l`UVUmž`K`_]7ca`a`cbg`

6Y`]YVhYfY`B`UW`f]W`hYb`

:`U`g`8i`Yg`j`YfdUggh`Ugh`

f`b`W]cbfX`ž`gž`]X`l`o`j`Uf`gž`Z`g`1`X`[`Yh9`Ya`Ybhg6mHU[`B`Ua`YfgŁ`Q`\$`Q`
]Z`f`K`[`Yh9`Ya`Ybh6m`X`f]X`Ł`f`Y`hi`fb`/`g`1`X`W`f`Y`U`h`Y`9`Ya`YbhfgŁ`/`g`]X`1`
]X`/`g`"gfW`" `h`hd`g`#`W`c`b`b`Y`W`h`Z`U`W`V`cc`_"`b`Y`h`#`b`S`l`G`#`g`X`_"`g`.`l`Z`V`a``1`%`
j`Yfg]cb1`j`'`"&`/`Z`g`d`U`f`Y`b`h`B`c`X`Y`]bgYfh6Y`Zc`f`Y`f`gž`Z`gŁ`/`q`f`X`c`W`a`Y`b`hž`
fgW`f]d`h`ž`f`Z`U`W`V`cc`_!`g`g`X`_`f`Ł`/`

6Ygi WXYb'GjY'i bg'Ui Z' _fmdhc!bYk g"Uh