

F 6 '@Y]dn][ 'gYhnh'Ui Z'Gc`Ufdck Yf. 'BYi Yg  
? Ud]hY`'ZØf`YfbYi YfVUfY`9bYf[ ]Y°

F 6 '@Y]dn][ 'bghU`'Yfh'Y]bY'D\chcj c`hU]\_!5b`U[ Y'a ]h'(-,  
Gc`Ufa cXi`Yb`ni f`bUW\U'h][ Yb`9bYf[ ]Yj Yfgcf[ i b[ 'Ub`XYf  
bYi Yb'; YgW`ÀZhghY`Y"



7c hhUk Y[ ž '@Y]dn][ ž`8 Yi hgW`UbX`!`9]b`gdUbbYbXYg`? Ud]hY`']b  
XYf'; YgW`]W`hY`XYg': i » VU`g`i bX`XYf`bUW\U'h][ Yb`9bYf[ ]Y  
YfÖZbYhig]W`a ]h`XYf`bYi Yb`D\chcj c`hU]\_!5b`U[ Y`Ua  
HfU]b]b[ gnYbhfi a`gck ]Y`XYf'; YgW`ÀZhghY`Y`j cb`F 6 '@Y]dn][ "'5a  
&('› b]’&\$&) `ZY]YfhY`XYf`7`i V`[ Ya Y]bgUa`a ]h`XYf  
9bYf[ ]Y`\_cbnYdhY`8Yi hgW`UbX`fØ?8Ł`X]Y`cZZ]h]Y`Y  
≠VYhf]YVbU`a Y`X]YgYf`VYY]bXfi W`YbXYb`DJ!; fc» Ub`U[ Y`"8]YgY  
DUfhbYfgW`UZhj YfZc`[ h`XUg`A`chc.` B UW\U'h][ \_Y]h]gh`HYUa`gUW`Y  
`[ Ya Y]bgUa`YbYf[ ]Y[ Y`UXYb`Ui Zi bX`bYVYb`XYa`D`Uhn`'i bX`Ui Z  
XYb`8`ÀW`Yfb` "

8]Y`hYW`b]gW`Y`l a`gYhni b[ `XYf`D\chcj c`hU]\_!5b`U[ Y`ghY`h`Y]bYb  
k ]W`h][ Yb`GW`f]h]b`F ]W`hi b[ `Y]bYf`\_`]a` UZFyi bX`]W`YfYb

9bYf[ ]Yj Yfgcf[ i b[ 'XUF''8 ]Y'5b`U[ Y'Ui ZXYa '8 UWX'XYf  
: i »VU``U\_UXYa ]Y'Ua '7chhUk Y[ 'i a ZUggh]bg[ YgUa h(- ,  
Gc`Ufa cXi `Y'i bX`YfghfYW\_hig]WX`ØVYf`Y]bY': `ÀWX`Y`j cb`- +&ž) 'a †"  
8]YgY`\\Uh`Y]bY'; YgUa h`Y]ghi b[ 'j cb`&\$- ž%\*`\_K d`i bX`gc``Y]bYb  
9][ Ybj YfVfUi WX`gUbhY]'`j cb`VYY]bXfi W\_YbXYb`- - ž) 'i 'YffY]WX`Yb"  
8 Ug`]gh`b]WX`h`bi f`Y]b`h`YWX`b]gWX`Yg`Dfc`Y\_hž`gcbXYfb`i bgYf  
<YfnYbgdfc`Y\_h žYf`\_`Àfh`G]'`j c`6f`Ài Yfž`XYf`7GC`j cb`9?8"

## 9ZZ]n]YbhY`9bYf[ ]YY]bgdUfi b[

8]Y`bYi`Y'; YgWX`ÀZhghY``Y`j cb`F`6`@Y]dn][ `Yfk`UfhY`h`Y]bYb  
»\fYgghfca`VYXUfZ]`cb`fi bX`\*`\$\$`\$\$`\$\_K`\\ž`i bX`X]Y`]bghU``YfhY  
D\chcj`c`hU]\_!5b`U[ Y`k`]fX`XUni`VY]hfU[ Ybž`X]YgYb`6YXUfZ  
g][ b]Z]\_Ubh`ni`XYW\_Yb``8 Ug`Vf]b[ h`b]WX`h`bi f`Z]bUbn]Y``Y`J`cfhY]`Y  
Xi`fWX`[ YgYb`\_hY`9bYf[ ]Y`\_cghYb`ž`gcbXYfb`Y]ghY`h`Ui`WX`Y]bYb  
k`Yfhj`c``Yb`6Y]hfU[ `ni`a`?`a`UgWX`i`hn``8]Y`À`f`]WX`Y  
7C`!9]bgdUfi b[ `k`]fX`Ui`Z`Yhk`U`-`\*`-`\$(`\_[`[ YgWX`À`mhž`k`Ug`XYb  
d`cg]h]j`Yb`9]bZi`gg`X]YgYf`⊕]h]Uh]j`Y`i`bhYfghfY]WX`h"

8]Y`5b`U[ Y`YfnYi`[ h]b`bi`f`g]YVYb`HU[ Yb`Yhk`U`+"`\$\$\$`\_K`\\ž`k`Ug  
XYa`»\fYgj`YfVfUi`WX`Y]bYg`hmd]gWX`Yb`9]bZUa`j]Yb`\\Ui`gYg  
Ybhgd]f]WX`h``8 Ug`nY][ hž`k`]Y`j`]Y`9bYf[ ]Y`\\Yf`bUWX`\\U`h][ `i`bX  
i`a`k`Y`hž`fYi`bX`]WX`dfcXi`n]Yfhk`YfXYb`\_Ubb``»bg`A`Umž`7CC`j`cb  
F`6`@Y]dn][ ž`\\YVh`\\Yfj`cf.`8]Y`6YXYi`hi`b[ `XYf`bYi`Yb`DJ!5b`U[ Y  
ZØf`X]Y`\_]a`Už`fYi`bX`]WX`Y`9bYf[ ]Yj`Yfgcf[ i b[ `\_Ubb`[ Uf`b]WX`h`\\c`WX  
[ Ybi`[ `Y]b[ YgWX`À`mh`k`YfXYb``8 Yb`J`YfUbhk`cfh]WX`Yb`]gh`Yg  
k`]WX`h][ ž`XUgg`b]WX`h`bi`f]a`Gd]Y`VYhf]YVž`gcbXYfb`Ui`WX`VY]`XYb  
6Yhf]YVgUV`Ài`ZYb`Ui`Z`BUWX`\\U`h][ \_Y]h[ YgYmh`k`]fX"

## B]WX`h`bi`f`F`6`@Y]dn][ `]a`9]b`\_`Ub[ `a`]h`XYf B`Uhi`f`

⇒ a`Yf`a`Y`f`Gdcfhj`YfY]bYž`]bgVYgcbXYfY`]b`XYf`6i`bXYg`][ Už  
gYhmYb`Ui`Z`bUWX`\\U`h][ Y`9bYf[ ]Y`Øgi`b[ Yb``@Ui`h`<`@Gd`c`fhg  
[ Yk`]bbYb`D\chcj`c`hU]\_!`i`bX`Gc`Ufh`Yfa`]Y!5b`U[ Yb`ni`bY`\\a`YbX  
Ub`6YXYi`hi`b[ ž`XU`g]Y`X]Y`9bYf[ ]Y`\_cghYb`gYb`\_Yb`i`bX`XYb  
7C`!5i`gghc»`fYXi`n]YfYb``8]Y`⊕hY[ fUh]cb`j`cb`Gc`UfYbYf[ ]Y

Yfa Ò[ `]WkhYg'Gdcfhj YfY]bYbžV]g'ni ' ' \$'DfcnYbh'\fYg'À\`f]WkYb  
Ghfca VYXUfZg'gY`Vghini `dfcXi n]YfYb"

A ]h'Y]bYa ` \_UfYb': c\_i g'Ui Z'X]Y'Ni \_i bZh'VYUVg]Wkh[ h'F 6 '@Y]dn][  
Ui Wkž'XYb'9]bgUhn'YfbYi YfVUfYf'9bYf[ ]Yb'fi bX'i a `XUg'GhUX]cb  
Ui gni VUi Yb"8 Ug'9b[ U[ Ya Ybh'nY][ hž'XUgg'X]Y' ðhY[ fUh]cb'j cb  
i a k Y`hžfYi bX']WkYf'HYWkbc`c[ ]Y'b]Wkh'bi f'XYa `?'a U  
ni [ i hY\_ca a hž'gcbXYfb'Ui Wk`Ub[ Zf]gh][ `k ]fhgWkUZh]WkY'J cfhY]Y  
a ]h'g]Wk`Vf]b[ h"

Ni gUa a Yb[ YZUggh']gh'X]Y' ðghU`Uh]cb'XYf'D\c h c'j c`hU]\_!5b`U[ Y  
Ua `7chhUk Y[ `b]Wkh'Y]bZUWk`Y]b`\_i [ Yf'GWkUWkni [ ž'gcbXYfb'Y]b  
f]Wkhi b[ gk Y]gYbXYg'Dfc`Y`h'žf'XYb': i » VU`gd cfh]b'8 Yi hgWk`UbX"  
8 Yf'HfYbX'nY][ h`\_Ufž'XUgg'B UWk`U'h][ \_Y]h]a `DfcZ]gd cfh]j cb  
[ fc» Ya `K Yfh']ghž'i bX`F 6 '@Y]dn][ `b]a a h`\]YfVY]`Y]bY  
J cffY]hYffc`Y`Y]bž'X]Y'UbXYfY'J YfY]bY'ni a `B UWkU`a Yb'Ub fY [ Yb  
k ]fX"

8 Yf`K Y[ `]b`X]Y`[ fØbY'Ni \_i bZh']gh[ YYVbYh' `i bX`F 6 '@Y]dn][ `nY][ hž  
k ]Y g'[ Y`h"

8 YhU]`g	
C fh	7 chhUk Y[ ž'@Y]dn][ ž'8 Yi hgWk`UbX
E i Y`Yb	<ul style="list-style-type: none"><li>• k k k "gc`UfgYfj Yf"XY</li><li>• k k k "dj !a U[ Un]bY"XY</li><li>• k k k "`gd cfhg"XY</li></ul>

6 Ygi WkYb`G]Y'i bg'Ui Z.`b!U[ "bYh