



LING5015

8]gWt i fgY `5 bU`mg]g

HYfa `H\ fYY`##`&\$&\$

7ci fgY`Cj Yfj]Yk

GHJZ7cbHJW8YHU`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWJhcb	D\cbY
5b]_i` < Uhcgg	U"Uhcgg4 i bgk "YXi "Ui	VmUddc]bħa Ybh	A cfj Yb`6fck b	Ž*%-' ,) , ' (\$

GWcc``7cbHJW8YHU`Zcfa Uhjcb

GWcc``cZ<i a Ub]hYg`UbX:@Jb[i U[Yg

@cWJhcb. GWcc``C ZWŽA 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 Uj: [\U`4 i bgk "YXi "Ui](#)

7 ci fgY'8YHJ]g

7 fYX]hDc]bqg '*

Gi a a UfmcZ\Y'7 ci fgY

H\]g'Wci fgY'XYj Y'cdg'mci f'fYgYUfW'g_]`g'UbX'mci f'Uk UfYbYgg'cZ'Ub[i U[Y' i gY']b'gcWYfm'5''_Ym UddfcUWX'g'hc' hYI hUbu'mg]g'k]''VY'fYj]Yk YX'hc' []j Y'mci 'U'VfcUX'dYfgdYWVj Yzk \]W' mci 'Wb'Udd'mhc'U fUb[Y'cZ]gWd']bUfmW'cbhYI hg']bW' X]b['Udd']YX'']b[i]gh]VgZ'fUbg'Uhc'b'UbX']bH'fdYfUhc'bZ'a YX]U'UbX W'ca a i b]W]h'cb'gh' X]Yg'UbX'bUffU]j Y'UbU'mg]g''Mci 'k]''XYj Y'cd'mci f'W]h]W']h']b_]b['UVci h\ck' 'Ub[i U[Y' i gY'fYZYW'g'UbX'g\UdYg'ci f'k cfX'UbX'X]gW'gg'gcW]U' d\Ybca YbU'fY"["Yei U']mZ'gcW]U' ^ gh]W'Z fYdfYgYbH]cb'cZUgmi a' gYY_YfgZ'YH'W'hc'fci [\ 'hYI hUbu'mg]g''Mci 'k]''U'gc'YUfb'UVci h\ck'gdYU_Yfg a U_Y'W'c]W'g'hc' dYfZ'ca' h'Y'f']XYbh]mZ'W'c'dYfU'Y'UbX'YI d'fYgg'dc']h'Y'Y'gg']b'W'cbj YfgUhc'bg'UbX'bUffU'Y' dUghYj Ybqg'' h'Y'f' g'cZk f]h'Y'b' h'YI hgZ'mci 'k]''gh' XmW'c' \Yg]cb'UbX'W'c' \Yf'Y'W']b'UWXYa]Wk f]h]b[Z'UbX h']g'k]'' \Y'd'mci 'VY'U'VY'h'Y'f'k f]h'Y'f'': cf'mci f'dfc'Y'W'gZ'mci 'k]''VY'Z'f'Y'hc' W'ccgY'Z'ca'U'VfcUX'fUb[Y'cZ h'YI h'md'Yg']bW' X]b['bYk gdUdYfgZ'fUbg'Uhc'b#bH'fdYf]b['h'YI hgZ'UWXYa]W'h'YI hgZ'bU' h'fU'W'cbj YfgUhc'bg'UbX gcW]U'a YX]U'h'YI hg''

7 ci fgY '@YUfb]b['Ci hWca Yg

% " X]Ybh]ZmUbX''UVY'Z'YU' h'fYg'cZbU' h'fU'W'cbj YfgUhc'bg']b'9b[']g\ 'i g]b['W'cbj YfgUhc'bg'UbU'mg]g h'W'cb]ei Yg"
&" F YW'c'fX'UbX'h'fUbgW]VY'U'g\cfh'W'cbj YfgUhc'bg']g]b['h'fUbgW]d'hc'b'W'cbj Ybh]cbg"
' " 8Yg][b'U'fYgYUfW' d'fc'Y'W' h']g]b['X]gW'ci fgY'UbU'mg]g'a Y'h'c'Xg"
(" 9j U'i U'h' h'Y'W'c'bbY'W]h'cbg'VY'h' Y'Y'b'Ub[i U[Y' i gY'UbX'gcW]U'Z'dc']h]W'UbX'W' h'fU'Z'ca' Uhc'bg"
) " 8Yj Y'cd'Ub'UbU'm]W']gh'fU'Y' [mhc'YI d'cfY'dU'h'Y'fbg'cZgdc_Y'b'cf'k f]h'Y'b'X]gW'ci fgY"
*" 5f[i Y'Z'f'h'Y'j'U'X]m'icZU'X]gW'ci fgY'UbU'm]W'UddfcUWX'UbX']i gh'fU'Y' h'Y' i gY'cZ\Y'UddfcUWX h'fci [\ 'YI Ua d'Yg''

HYUWX]b['GhfUHY []Yg'

@YUfb]b['UbX'HYUWX]b['F Uhc'bu'Y

H\Y'W'cbh'Y'bhk Ug'W]fY'Z' 'mgY'Y'W'X'hc'W'cbj Yf'U''a U'cf'h'Y'b'Xg']b'X]gW'ci fgY'UbU'mg]g'<ck Yj YfZ'h']g'a YUbg h'U'h'Y'j Uf]ci g'UddfcUWX'g'UfY'b'ch'YI d'cfYX']b'XY'd'h' " H\Y'U]a']g'hc' []j Y'Ub']b'f'c'Xi W]h'cb'hc'YUWX UddfcUWX'gc'h'U'gh' X]Ybqg'W'cb'g'Y'W'h'Y'VY'gh'UddfcUWX'Z'f'h'Y']f'fYgYUfW' d' fdcgYg''

HYUWX]b['GhfUHY []Yg'

7'UggYg'k]''fi b'Z'f'&' \ci fg'Z]W'V'h'!Z]W']b'U'k cf_g\cd'Z'ca' U'h' h'Y' h'YUWX]b['gh'fU'Y' [m]g'hc'W'ca V]bY' h'Y h'Y'cf'Y'h]W' [fci bX]b['k]h' d'fU'W]W'Udd']W]h'cbg''A' cgh'cZ'h'Y'h'ja' Y'k]''VY'U'c'W]h'Y'X'hc' [fci d'X]gW'gg]cbg VUgYX'cb'h'Y'dfY'gY'h'X]gW'gg]cb'ei Ygh]cbg'UbX'YI YfW]gYg'Ug'ci h]bYX']b'h'Y'W'ci fgY'g'W'Y'Xi 'Y''@Y'W'h' fY h'ja' Y'k]''VY']ja']h'Y'Z'f'W]U'f]Z]W]h'cb'cZ'V'cb'W'd'g''G'h' X]Ybqg'UfY'f'Yei]fYX'hc' d'fY'dU'fY' h'Y']f'U'bgk Yfg'hc' h'Y YI Y'f'W]gYg'UbX'U'W]j Y'm'fU_Y'd'U'f'h]b'W]Ugg'X]gW'gg]cb'': cf'h'Y'd'fc'Y'W'h'Ugg][ba Ybh'gh' X]Ybqg'k]''W]ffm'ci h h'Y']f']b'X]j]xi U'gh' X'mcZ'X]gW'ci fgY'UbU'mg]g'cb'gdc_Y'b'cf'k f]h'Y'b'Z'ca' g'cZ'X]gW'ci fgY''

5ggYgga Ybh

5ggYgga YbhHUg_g`

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
7cbj YfgUH]cb'5bU'mg]g`	' \$i	%* #/\$#&\$&\$' \$) . \$\$' DA	%ž&
Dfc YWñDfYgYbHU]cb`	&\$i	' \$/#/\$#&\$&\$' \$) . \$\$' DA	(ž*
Dfc YWñ) \$i	&\$#/#/#&\$&\$' \$) . \$\$' DA	' ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh%`7cbj YfgUH]cb'5bU'mg]g`

GHUfhXUH. `Bch5dd]WUV`Y

8YHU]`g.

Gh XYbh]Wta d`YH`U`Wcbj YfgUH]cb`UbU'mg]g`HUg_`cZU`g\cfhbUhi fU`gdYYW`gUa d`Y`"H\Y`HUg_`]g`Ufci bX
%\$\$\$`k`cfXg"

Gh XYbh]fYW]j Y`k`f]hYb`ZYXVUW`"

Hi fb]h]b`gYH]b[. H\]g`Ugg][ba Ybh]g`gi Va]hYX`h`fci [\`Hi fb]h]b`UbX`gh XYbh]Xc`bchgYY`Hi fb]h]b
g]a]Uf]mifYdcf]g"

5ggYgga Ybh&`Dfc YWñDfYgYbHU]cb

GHUfhXUH. `

8YHU]`g.

H\]g`]g`Ub`]bX]j]Xi U`HUg_`"Gh XYbh]g []j Y`U`g\cfhif) `a]bi hYgE`dfYgYbHU]cb`f%\$i E`cb`h\Y]f`]bX]j]Xi U`
X]gWci fgY`UbU'mg]g`a]b]!dfc YWñd`Ub`UbX`gi Va]hiU`) \$!k`cfX`dfYgYbHU]cb`UVghfUWñf%\$i E`"Gh XYbh]UFY

H\]g:]g:U'dfc'YVhUgg][ba YbhcZ' \$\$\$'k cfXg'YI Wi X]b['fYZfYbW'g" Gh XYbtg'W\ccgY'Ub'UFYU'cZ]bHfYgh]b
X]gVti fgY'gh X]Yg'UbX'XYj Y'cd'U'a]b]!dfc'YVh'H\Y'dfc'YVh]bWi XYg'XUH'UbU'mg]g'i g]b['fY'Yj Ubh
X]gVti fgY'h\YcfmUbX'a YhcXg'Vtj YfYX'j]b'h\Y'Vti fgY"

Gh XYbtg'fYVW]j Y'k f]Hb'ZYXVUW_"

5 HfYbXUbW F Yei JfYa Ybhg

D YUgY bchY hUh YWñ fy fYwéfx]b[g Ufy bchUj U]UV Y Zcf h]g Wéi fgY "Gh XYbhg Ufy gfc b[mYbWéi fU[YX hc UHfYbX U WUggYg UbX Wé bUWh hY 7 ci fgY 5i h.c f]mhc a U_Y U HfYbUh] Y UffUb[Ya Ybhg Zcf WUggYg a JggYX"

7 ci fgY GWXYXi Y

[J Jyk WUgg ha YhUVY](#)

Hja YhUVY

8 UHf	HmdY	7 cbhYbh
K YY_% % (GYdhYa VYf! % GYdhYa VYf	Hcd]W	<p>hfcXi W]cb. Cj Yfj JYk cZ8]gWéi fgY 5bU'mg]g'</p> <p>% K Uf]b['7 \UdhYf"% &" 7 UbX]bž 7 "B "ž 7 f]Wk bčž >"ž/ 'A ccFYžG" "<" f&,\$%+L" 9I d'cf]b['8]gWéi fgY]b'7 cbhYI hUbX]b'5W]cb""DU[fUj Y'A UWá]"Ub'I ?" 7 < 5DH9F '% 5g_]b['W]hWU'ei Ygh]cbg. < ck]g'X]gWéi fgY XYZ]bYX'UbX cWUHYX3</p> <p>CB@B9: CFI A . 'gh XYbhg X]gW gg' _YmWé bWdHg UbX XYZ]b]hcbg</p>
K YY_& . &%GYdhYa VYf! &) GYdhYa VYf	Hcd]W	<p>8]gWéi fgY gfi Wñ fy =fñYI hgfñ Wñ fyž[YbfY UbX dUfh]W]dUbrgk</p> <p>% K Uf]b['7 \UdhYfg &! ' -'ghfi Wñ fy cZñYI hg &" 7 UbX]bž 7 "B "ž 7 f]Wk bčž >"ž/ 'A ccFYžG" "<" f&,\$%+L" 9I d'cf]b['8]gWéi fgY]b'7 cbhYI hUbX]b'5W]cb""DU[fUj Y'A UWá]"Ub'I ?" 7 < 5DH9F " . K \c]g]bj c] YX]b'X]gWéi fgY3 GYW]cb" "+; YbfYg</p> <p>CB@B9: CFI A . 'gh XYbhg UbU'mgY ZYUñ fyg cZUb UWUXYa]WñYI h</p>
K YY_' . & , GYdhYa VYf! & C Wé VYf	Hcd]W	<p>8]gWéi fgY gfi Wñ fy =f]ghfi Wñ fy cZ Wébj YfgU]h]cbgk</p> <p>% K Uf]b['7 \UdhYfg &! ' -'ghfi Wñ fy cZñYI _ &" 7 UbX]bž 7 "B "ž 7 f]Wk bčž >"ž/ 'A ccFYžG" "<" f&,\$%+L" 9I d'cf]b['8]gWéi fgY]b'7 cbhYI hUbX]b'5W]cb""DU[fUj Y'A UWá]"Ub'I ?" 7 < 5DH9F '* . K \mñ hUñbck 3</p> <p>5`gc fYWéa a YbXYX. Dca YfUbm'UbX: Y \f&,\$%+L" 7 cbj YfgU]h]cb'5bU'mg]g"'7 \UdhYf- '8]gWéi fgY Gh X]Yg. 5 'A i 'hX]gW]d]bUfmi hfcXi W]cbž YX]hYX Vm</p>

8]^_žHYi b'5"j UbžG5; 9 'Di V]W]h]cbgž&\$%%"fU
ghYd'VmighYd [i]XYŁ

CB@B9: CFI A.'Dcgh]hg\cfhZ]a .'
[\hdg.##rci li "VY#JJ \[Y>\) Ye`GA](#)

		<p>\YfY3ž/eWUf[a` e a` XSUWS` V XSUW adj S` V `7 < 5DH9F " " -eWUf[a` e a` Ua__g` [f[Ve aXbdSuf[UWS` V _ W_ TWbZ[b USfWadfeSf[a` ž</p> <p>5`gc`fYWca a YbXYX.</p> <p>K Yglž@UbX`HfYghYf`f&\$% Ł: UWk cf_`cb: UWVcc_ @Ub[i U[Y`cZbYk`a YX]U" 7\UdhYf`,]b`HUbbYbž8" UbX`HfYghYfž5"A "fYX"Ł8]gWci fgY`&"\$"; Ycf[Ytck b l b]j Yfg]mDfYgg"</p> <p>CB@B9: CFI A .`ghi XYbtg`X]gW gg`ZUWk cf_`cb : UWVcc_"</p>
<p>K YY_*.`%`C WcVYf!`& C WcVYf</p>	<p>Hcd]W</p>	<p>8]gWci fgY`UbX`X`Ybh]mi=</p> <p>%` K Uf]b[`7\UdhYf`+ &" 8Y':]bUž5"f&\$%Ł8]gWci fgY`UbX`]XYbh]m! 7\UdhYf`%`]b`8]gWci fgY`Gh`X]Yg. 5 A i`hX]gWd`]bUfm`bhfci W]cbžYX]hYX`Vm8]`ž HYi b`5"j UbžG5; 9`Di V`]W]h]cbgž7\UdhYf`+</p> <p>5`gc`fYWca a YbXYX.</p> <p>G]a cb; ccXa Ub/`Gi`gUb`5"GdYYf`f&\$%+Ł 7Uf[cfmi`gY`]b`hY`7cbghf] W]cb`cZ5gmi a GYY_Yfgž7f]h]W]`8]gWci fgY`Gh`X]Ygž(.&ž%`)!%`ž 8C`=%\$`%\$, \$#%+(\$) - \$\$+\$%(* (, ' &</p> <p><Uhcggž5"f&\$%Ł"K \YfY`UfY`mci`Zfca 3`X`Ybh]m Wcbghf] W]cb`UbX`Yi`dYf]YbWg`cZ`c`h`Yf]b[`]b`h`Y bUffU]j Yg`cZGi`XUbYgY`fYž [YY!VUW[fci bX 5i`ghfU`]Ubg""8]gWci fgY`/`Gc`WY]m&`fŁŁ`(+!*, "</p> <p>CB@B9: CFI A .`ghi XYbhi`d`cUX`U`g`cfhbYk`g]hYa`UbX`Yi`d`cfY`a Ya`VYfg`d`WU]h[cf]gU]h]cb.`\ck Xc`bYk`gdUdYfg`fYžf`h`Y`Y`Ybh]UbX`dYcd`Y3`K` \Uh Xc`h`YgY`Wc]W]g`h`i`g`UVci`h]XYc`c[miUbX fYdfYgYbU]h]cb3</p>
<p>K YY_+.`&`C WcVYf!`\$ C WcVYf</p>	<p>Hcd]W</p>	<p>8]gWci fgY`UbX`]XYc`c[mi=f7 85`h`Yc`fnt</p> <p>%` K Uf]b[`7\UdhYf`, &" 7UbX`]bž7""B`ž7f]W]h]cbž>"ž/`A`ccfYžG""<" f&\$%+Ł"9i`d`cf]b[`8]gWci fgY`]b`7cbhYi`hUbX]b`5W]cb""DU`[fUj`Y`A`UW`]`Ub`I`?" 7<5DH9F` ; ,`<ck`Xc`X]gWci fgY`UbX`gc`W]U` W]Ub[Y`Xf]j`Y`YUW`c`h`Yf3</p> <p>5`gc`fYWca a YbXYX.</p> <p>: U]fWci [\žB""UbX`K`cXU`žF"f&\$%Ł7f]h]W]</p>

		<p>8]gWŁi fgY`5bU`mg]g"7\UdhYf%+`]b`8]gWŁi fgY Gh X]Yg.`5`A i`hX]gW]d`]bUfm`bfcXi W]cbžYX]hYX`Vm 8]^žHYi b`5"j UbžG5; 9`Di V`]W]h]cbgž&\$\$%"</p> <p>J Ub`8]^žH"i`f&\$\$%&8]gWŁi fgY`UbX`]XYc`c[m` 7\UdhYf%`]b`8]gWŁi fgY`Gh X]Yg.`5`A i`hX]gW]d`]bUfm` bfcXi W]cbžYX]hYX`Vm8]^žHYi b`5"j UbžG5; 9`Di V`]W]h]cbgž&\$\$%"</p> <p>E fgVW fe bdMŁW f bca`WUf [VWSe</p> <p>C B@-B9: C F I A .`Gh XYb]g`X]gW gg`W ffYb]hdc`]h]W] X]gWŁi fgY`#bYk g`g]hcfm]UbX`YI d`c`fY`]XYc`c[m]b`hYI h`</p>
<p>K YY_` .`&`Bcj Ya VYf!`*` Bcj Ya VYf</p>	<p>Hcd]W</p>	<p>8]gWŁi fgY`UbX`]XYc`c[m`=fa i`h]a cXU`]mŁ</p> <p>%` K Uf]b[`7\UdhYf`-</p> <p>5`gc`fYWŁa a YbXYX.</p> <p>F ca U[bi c`c`ž5"i`f&\$\$-Ł`Dc`]h]W]`X]gWŁi fgY`]b hfUbg`U]h]cb.`5`WŁfdi g!VUgYX`gh XmiHfUbg`U]h]cb`UbX` b]hYfdYf]b[`Gh X]Yg (.`%f&\$\$-Łž`%`-\$`Xc] %\$`%\$+) #]g("`%`\$`fca</p> <p>8]a]h]g`GYfU]gž`GUfU`; fYWŁž7\]UfU`Dc``Ufc`] / 7\]UfU`>Yfa]b]!A Ufh]bYn`Gcf]U`f&\$\$-Ł`Hck UfXg`Ub]b]hY[fU]hX`Uf[i a Ybh]h] Y`UddfcUW`h`a i`h]a cXU` W]h]W]`X]gWŁi fgY`UbU`mg]g. Yj]XYbW`Zca`hY dcffU]mU`cZfYŽ [YYg`UbX`]a a][fU]h]g`]b; fYU` bYk gdUdYfgž7f]h]W]`8]gWŁi fgY`Gh X]Ygž8C = %\$`%\$, \$`#%+(\$) - \$(`&\$%-`%+\$%) \$-</p> <p>C B@-B9: C F I A .`gh XYb]g`dcghU`a i`h]a cXU`hYI h a U[Un]bY`WŁj Yf`cf`UXj Yfh]gYa YbhUbX`]X]gW gg`hY gcW]U`gYa]ch]WUgdYW]g`cZk`Uha YUb]b[]g WŁbj YmYX`k]h`k`U]h]cc`g</p>
<p>K YY_`-`-`Bcj Ya VYf!` %` Bcj Ya VYf</p>	<p>F YUX]b[</p>	<p>B c`WUgg`gWYXi`YX"</p>
<p>K YY_`%\$.`%*`Bcj Ya VYf!` &\$`Bcj Ya VYf</p>	<p>F YUX]b[</p>	<p>B c`WUgg`gWYXi`YX"</p>

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

- K Uf]b[ž< Ubgi b`N\Ub[`f&\$% Ł8]gWci fgY`UbU`mg]g. H\Y`ei Ygh]cbg`X]gWci fgY`UbU`mg]g Ug_`UbX \ck`h\YmUbgk Yf`h\Ya "F ci hYX[Y"Y6cc_`I BGK `@]VfUfm
- 7 UbX`]bž7 "B"ž7 f]W\rcbž>"ž/ `A ccFYžG""<"f&\$%+Ł"9I d`cf]b[`8]gWci fgY`]b`7 cbhYI hUbX`]b`5W]cb" DU`[fUj Y`A Uvå]`Ub`I ?""Y6cc_`I BGK `@]VfUfm

F YWca a YbXYX`F Ygci fWg

F YWca a YbXYX`Y6cc_g`]b`I BGK `@]VfUfm

- J Ub`8]^žH""5" fYX`Łf&\$%Ł8]gWci fgY`Gh`X]Yg. 5`A i`h]X]gWd`]bUfm`b]fcXi W]cbžG5; 9 Di V`]W]h]cbgž&\$%`"DfcE i Ygh9Vcc_`7 YbfU`ž \hdg.##YVcc_`W]bfU"dfcei Ygh`Wca #]V# bgk #YfU]"UW]cb3XcW81*, - () %
- DU`f]X[Yž6f]Ub`f&\$%Ł8]gWci fgY`UbU`mg]g. 5b`]b]fcXi W]cb""&bX`YX""6`cca gVi fm`Y6cc_`]b I BGK `@]VfUfm
- < mUbXž? "žYhU""f&\$%Ł"6`cca gVi fm7ca dUb]cb`rc`8]gWci fgY`5bU`mg]g"@cbXcbžI ? ž 6`cca gVi fmDi V`]g\]b[`D`W`
- 6]VYfž8"ž/ `7 cbfUXžG"f&\$%- Ł" F Y[]ghYfž[YbfYžUbX`ghmY""F Yf]Yj YX`žca \hdg.##YVcc_`W]bfU"dfcei Ygh`Wca

WU`Yb[]b["

Gh XYbhZYXVUW_k]`VY`[UhYfYX'h\fc [\ `cbY!a]bi h`dUdYfg`k YY_`m`

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`UgY`
HY`Yd`l`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`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`i`cb`k`YY`YbXg`fI`*)`XUmg`U`mY`UfI`"Ʒmci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`Xi`Y`hc`U`Zi`h`k`]h`Hi`fb]h]b`mci`i`a`Um`Udd`m`Zc`f`Ub`YI`HY`bg]cb`z`Vi`hmc`i`
a`i`gh`fY`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`Ub`mci`h`Y`f`fY`Yj`Ub`h`Xc`W`a`Y`b`hg`L`hc`
]b`Wi`XY`Ug`Yj`]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`m`f`Y`W`j`Y`U`h]W`Y`hbi`a`VY`f`z`Vi`h]Z`mci`HY`Yd`l`cb`Y`mci`k`]`b`Y`Y`X`hc`gd`Y`W`Z]W`m`Ug`_`Zc`f`cb`Y`"
Hi`fb]h]b`U`gc`d`fcj`]X`Y`gi`d`X`U`h`g`i`cb`h`Y]f`g`mg`h`Ya`i`gh`U`h`g`i`cb`Hk`]h`Y`f`"

;`Yb`Y`f`U`m`z`Ugg`Y`gga`Yb`hi`U`g`_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`cb]W`m`j`]U`Y`]h`Y`f`Hi`fb]h]b`c`f`U`A`cc`X`Y`
Ugg][`ba`Yb`h`i`h`]b`g`h`U`b`W`g`k` \Y`f`Y`h`l`g`]g`b`ch`d`c`g`g]V`Y`z`]h`k`]`V`Y`g`h`U`h`X`i`cb`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`fa`U`h]cb`cb`l`ck`hc`gi`Va`]h`Ugg][`ba`Yb`hg`i`cb`]b`Y`j`]U`A`cc`X`Y`.`h`h`d`g`#`gh`XY`b`h`i`bgk`"YXi`"Ui`#`ck`!
gi`Va`]h`Ugg][`ba`Yb`h`a`cc`X`Y`"

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

D`U[]Uf]ga]g`i]g]b[`hY`k cfXg`cf]XYUg`cZcH.Yfg`UbX`dFYgYbh]b[`hYa`Ug`mci`f`ck`b`" #WUb`hU`Y`a`Ubm`
Zcfa`gZ`Zca`XY`]VYfUH`VX`YU]b[`hc`UWV]XYbhU`m`Wc`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[`WUH[`cf]Yg.

7`cdm]b[.`i`g]b[`hY`gUa`Y`cf`j`Yfmg]a`]Uf`k`cfXg`hc`hY`cf][`]bU`hY`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`Ufh`UbX`XYg][`b`dfc`YWgZ`Ug`k`Y`Ug`
dfYgYbhU]cbg`k`YfY`gca`YcbY`dFYgYbh]Ubch`Yf`g`]XYUg`cf`k`cfXg`k`]h`ci`hWYX]h`

#Uddfcdf]UH`d`UfUd`fUg]b[.`7`U`b[]b[`U`Zk`k`cfXg`UbX`d`fUgYg`k`Y`a`cghm`fY`hU]b]b[`hY`cf][`]bU`
ghf`W`fY`UbX`#`cf`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`d`UfUd`fUgYg`Ubch`Yf`g`]XYUg`cf`k`cfXg`k`]h`ci`hWYX]h`UbX`hc`
d]YV]b[`hc[`Y`h`Y`f`ei`ch`g`UbX`d`UfUd`fUgYg`]bhc`U`bYk`k`c`Y`Z`k`]h`ci`hUddfcdf]UH`fY`ZY`fY`bW]b["

7`c`i`g]cb.`k`cf_]b[`k`]h`ch`Yfg`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`Ubch`Yf`g`h`XYbhVY`Zc`fY`hY`Xi`Y`XUH`Zc`f`Zc`f`hY`di`fdcgY`cZ`hY`a`
d`U[]Uf]g]b[`Uh`Ubmi]ja`Y`Z`dUm]b[`Ubch`Yf`dYfgcb`hc`dYfZcfa`Ub`UWUXYa`]W]Ug`_`Z`gh`U`]b[`cf`UW`i`]f]b[
Ubch`Yf`dYfgcb`g`UWUXYa`]Wk`cf`_`UbX`Wc`dm]b[]h`c`ZYf]b[`hc`Wc`a`d`Y`h`Ubch`Yf`dYfgcb`g`k`cf`_`cf`gYY_]b[

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5WwdfUV'Y'I gY'cZ
I BGK '⇒H'F Ygci fW'g'Dc`]Wñ

5 WUXYa]W=Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`tc.

- fYei Yg]Zcf`YI H`bg]cb/
-