

# EDST5452

7 cbhYa dcfUfmi∉ggi Ygʻ]bʻ@Ub[i U[Yʻ9Xi WUh]cb

GYa YghYf'C bY''#'&\$%

## 7 ci fgY<sup>·</sup>Cj Yfj ]Yk

### `GHJZZ`7cbHJWh`8YHJ]`g`

### 7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cWUhjcb	D∖cbY
D\]cbU'GHUb`Ym	d\]cbU"gHJb`Ym4 i bgk "YXi "Ui	VmUffUb[YaYbh!! d`YUqY'Ya U]``a Y	%\$-	- ' , ) %- ++

### GWXcc`7cbHJWhf=bZcfaUh]cb

GV%cc``cZ9XiVUHcb 5fhg`UbX`GcVJU``GVJYbV%g @YjY``%Z`>c\b'; ccXgY```6i]`X]b[`fl&\$Ł

H. Ž\*%f&L-',) %++ 9. YXi WUhjcb4 i bgk "YXi "Ui K. YXi WUhjcb"Ufhgi bgk "YXi "Ui

### 5 HYbXUbWYFYei]fYaYbhg

#### 5XX]h]cbU``GW&cc``cZ'9XiWUh]cb`UhhYbXUbWY`fYei]fYaYbhg

If JG YL dYWYX IN UNUbmighi XYbhYbfc "YX"]b'Ub'98 GH Wei fgY'k ]N IN Y GWLCC "CZ9Xi WUhcb'k ]" a U\_Y'U We'a a ]ha Ybhihe IN Y]f"YUfb]b[ 'UbX'UhYbX'U" WUggYg']b'Z `"k \YfY We'bhYbh]g'XY"]j YfYX ]b'U'ZJWY!he!ZJWY a cXY YL Widh]b'WffU]b'WffW a ghUbW g'k \YfY UVgYbWY ]g'Xi Y'he'] "bYggža ]gUXj Ybhi fY ef i bZefYgYYb WffW a ghUbW g'k \YfY UVgYbWY ]g'Xi Y'he'] "bYggža ]gUXj Ybhi fY ef i bZefYgYYb WffW a ghUbW g'k \YfY UVgYbWY ]g'Xi Y'he'] "bYggža ]gUXj Ybhi fY ef i bZefYgYYb WffW a ghUbW g'VYmebX'h Y ghi XYbhg We'bhfe'" '5 a ]b]a i a 'UhYbXUbWY fYei ]fYa YbheZ, \$i ']g'fYei ]fYX'Zef YUW. We'i fgY''' Ib'W'fhU]b'WffW a ghUbW gz'U'ghi XYbha Uma ]gg'i d'he'&\$i 'cZU'We'i fgY'k ]h ei hZefa U'' Udd']WUhjeb'UbX'i d'he''' i 'cZU'We'i fgY'k ]h'Zefa U''XeW a YbhUhjeb'fgYbhj ]U'Ya U]`'he We'i fgY We'bj Ybeft dfej ]X]b[ 'U'''h YfYei ]fYa Ybhg'XYHU]YX'VY'ek 'UfY'a Yh''Ghi XYbhg'beha YYhjb[ 'h Y'UhYbXUbWY fYei ]fYa Ybhg'ez h]bYX'UVej Y'k ]"''VY'Uk UfXYX'Ub'I bgUhjgZUWe'fm: U]`'fI : E'Zefih UhYbXUbWY fYei ]fYa Ybhg'ez h]bYX'UVej Y'k ]"''YY'Uk UfXYX'Ub'I bgUhjgZUWe'fm: U]`'fI : E'Zefih UhWe'i fgY'fY[ UfX'Ygg'eZ hY]f'dYfZefa UbWY']b'h'Y'UggYgga YbhHUg\_g'ef'ei ]fYa Ybhg'Zefih'Y'We'i fgY'''

: cf<sup>·</sup>Z fh\Yf<sup>·</sup>]bZcfa Uh]cb<sup>·</sup>cb<sup>·</sup>9Xi WUh]cb<sup>·</sup>Wci fgY<sup>·</sup>UhhYbXUbWY<sup>·</sup>fYei ]fYa Ybhgžd<sup>·</sup>YUgY<sup>·</sup>fYZYf<sup>·</sup>hc<sup>·</sup>h\Y<sup>·</sup>fYgdYWh]j Y 98GH<sup>·</sup>A ccX<sup>·</sup>Y<sup>·</sup>a cXi <sup>·</sup>YfgL<sup>u</sup>

### 5WUXYa]W=bZcfaUh]cb

5<sup>\*\*\*</sup>ghi XYbhgʻa i gha U\_YʻUʻj U`]XʻUhhYa dh'Uh'U<sup>\*\*\*</sup>UggYgga Ybhgʻ]bʻcfXYfʻhcʻdUggʻh\YʻWci fgY"

: cf`YggYbhJU``ghi XYbh]bZcfa UhJcb`fY`UhJb[`hc.`fYei Yghg`Zcf`YI hYbg]cb/fYj ]Yk `cZa Uf\_g/cVWV dUhJcbU``\YU`h UbX`gUZYhm'YI Ua ]bUhJcb`dfcVWXi fYg/gdYVJU``Vcbg]XYfUhJcb`]b`h\Y`Yj YbhcZ]``bYgg`cf`a ]gUXj Ybhi fY/ ghi XYbhYei ]hmUbX`X]gUV]`]hm'UbX`ch\Yf`YggYbhJU``UVUXYa ]W]bZcfa UhJcbž gYY`<u>\hhdg.#k k k "Ufhg"i bgk "YXi "Ui #W ffYbhIgh XYbhg#UVUXYa ]W]bZcfa UhJcb#dfchcVc`g![i]XY`]bYg#</u>

## 7ci fgY<sup>·</sup>8YHJ]`g

### 7 fYX]hDc]bhg\*\*\*

### Gi a a UfmcZhXY7ci fgY

Mci 'k]``VY']bHfcXi WYX'hc'WcbHYa dcfUfmXYVUHYg']b'9b[`]g\``Ub[i U[Y'YXi WUHjcb'Vch\']b'5i gHfU`]U'UbX ]bHYfbUHjcbU``mž'UbX'k]``YI Ua]bY'h\YgY'Zfca 'U'fUb[Y'cZdYfgdYWhjYg''=ggi Yg'mci 'k]``X]gW gg'k]``]bWi XY `Ub[i U[Y'HYUW\Yf']XYbHjhjYg']b'bUhj Y'UbX'bcb!bUhj Y``Ub[i U[Y'gYHjb[g/U'Wf]hjWU``UbU`mg]g'cZj Uf]ci g `Ub[i U[Y'HYUW\]b['a YH\cXc'c[]Yg']b'W\Ub[]b['`cWU``UbX'[`cVU``WcbHYI hg/UbX'h\Y'dc`]hjWg'UbX dYXU[c[]WU``]a d`]WUHjcbg'cZ9b[`]g\'Ug'U``]b[i U'ZfUbWU'''Mci 'k]```YUfb'UVci h\_YmdYXU[c[]WU``]ggi Yg'Vm XfUk]b['cb'h\Y``UHYghfYgYUfW\ZjbX]b[g''

### 5 hih Y WebWi g]cb cZih ]g Wei fgY h Y gh XYbhk ]``VY UV Y he

%" 7 f]h]WU``mYb[U[Y`k]h\`fYgYUfW\``]hYfUhifY`]b`h\Y`UfYU`cZ9b[`]g\``Ub[iU[Y`YXiWUh]cb"

&" 91 d`U]b`UbX`Yj U`i UHY`\ck `HYUVXYf`UbX``YUfbYf`]XYbHjHjYg`UZYWiHYUVX]b[ `UbX``YUfb]b[ "

' " 7 f]h]WU``mYI Ua ]bY`HU\_Yb!Zcf![fUbhYX`bch]cbg`]b`9b[`]g\``Ub[i U[Y`YXi WUh]cb"

("Gmbh\Yg]gY`]XYUg`]b``Ub[iU[Y`YXiWUh]cb'hc`Wf]h]WU``mUbU`mgY`9b[`]g\``Ub[iU[Y`YXiWUh]cb dfc[fUa\_g`]b`X]ZYfYbhWcbhYIhg"

### HYUW ]b[ GhfUhy[ ]Yg

HYUWX ]b[ 'GhfUhY[ ]Yg. 'HYUVX ]b[ 'ghfUhY[ ]Yg']bWi XY 'ZJWY!hc!ZJWY 'gYgg]cbg'k ]h\ 'cddcfhi b]h]Yg'Zcfimci 'hc Wc``UVcfUhY'k ]h\ 'dYYfg']b'ga U``![ fci d'UbX'd`YbUfmX]gW gg]cbgž'UbU`mgY']XYUg'UbX']ggi Ygž'UbX'fYZYWhcb mci f`ck b'hYUVX ]b[ ']b``][ \hcZbYk ']bZcfa Uh]cb''H\Y'Wci fgY'U`gc'i h]`]gYg'A ccX`Yž'Ub'cb`]bY``YUfb]b[ Ybj ]fcba Ybhk \YfY'mci 'WUb'UVWYgg']bZcfa Uh]cb'UbX'Wci fgY'fYUX]b[ gž'UbX'gi Va ]hUgg][ ba Ybhg'''

FUhjcbU`Y.`H\YgY`hYUW\]b[`ghfUhY[]Yg`fYZYWih\Y`gcW]U`!Wcbghfi Whjj]ghih\YcfmicZ`YUfb]b[`h\Uhi bXYfd]bg h\Y`Wci fgY`XYg][b"

## 5ighfu`]Ub`DfcZYgg]cbU``; fUXiUhY`HYUWX]b[`GhUbXUfXg

GHJbXUfX	8Yg₩f]dh]cb
%"" "(	9jU`iUHY`UbX`fYj]gY`gW&cc```YUfb]b[`UbX`HYUW&]b[`dfc[fUagžig]b[`YIdYfhUbX Wcaaib]mi_bck`YX[Y`UbX`YIdYf]YbWYž'hc`aYYhH&Y`bYYXg`cZghiXYbhg`k]h&`X]jYfgY

H\]g'UggYgga Ybh'hUg\_'bYYXg'hc'VY'dcghYX'cb'A ccX'Y'Vm).\$\$da 'cb'h\Y'Xi Y'XUhY"

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

5ggYgga Ybh& 8]gW gg]cb YggUm

GhUfhXUhY.Bch5dd`]WUV`Y

8YHU]`g. `HUg\_`&'! ``Gmbh.Yg]gY`mci f`fYUX]b[ž'h.]b\_]b[ž'UbX``Ub[i U[Y`HYUVX]b[#YUfb]b[`YI dYf]YbVW`]b`U k f]HYb`X]gW gg]cb`cZWcfY`]ggi Yg`Wcj YfYX`Vmih.Y`Wci fgY"`@Yb[h.`(\$\$\$`k cfXgGhi XYbhg`k]```fYWf]j Y`k f]HYb ZYYXVUW\_`k]h.]b`%\$`XUmg`cZgi Va ]gg]cb"

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

5gg][ba Ybh& 8]gW gg]cb 9ggUm"

fKY][\h]b[ \*\*\$1 /kcfX'Wcibh'(\$\$\$"Ł

g]a ]`Uf]hmifYdcfhg"

### Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

Ghi XYbhgʻUfYʻYI dYWhYXʻhcʻdi hih\Y]fʻbUa YgʻUbXʻghi XYbhibi a VYfgʻcbʻYj YfmdU[YʻcZh\Y]fʻUgg][ ba Ybhgʻ

### Hi fb]h]b Gi Va ]gg]cb

Zmci YbWci bhYf'U'dfcV'Ya 'k \Yb'UhYa dhjb[ 'hc'gi Va ]hmci f'Ugg][ ba Ybhih fci [ \ 'Hi fb]hjbž'd'YUgY hY'Yd\cbY'9I hYfbU''Gi ddcfhicb'- ', ) '' ' '%cf'Ya U]`'h Ya 'cb'<u>Yl hYfbU'hY'hgi ddcfh4 i bgk "YXi "Ui</u>"'Gi ddcfh \ci fg'UfY', .\$\$Ua '-'%\$.\$\$da 'cb'k YY\_XUmg'UbX'-.\$\$Ua '-') .\$\$da 'cb'k YY\_YbXg'fl \*) 'XUmg'U'mYUfŁ'' Zmci UfY'i bUV'Y'hc'gi Va ]hmci f'Ugg][ ba YbhXi Y'hc'U'ZJi `hk ]h 'Hi fb]hjb'mci 'a UmUdd`m'Zcf'Ub'YI hYbg]cbž'Vi hmci a i ghfYhU]b'mci f'hjW\_Yhbi a VYf'Zfca '9I hYfbU''Gi ddcfhfU'cb[ 'k]h 'Ubmch\Yf'fY'Yj UbhXcW a YbhgEhc ]bWi XY'Ug'Yj ]XYbWY hc'gi ddcfhimci f'YI hYbg]cb'Udd`]WUh]cb'''Zmci 'Ya U]`'9I hYfbU''Gi ddcfhimci 'k ]`` Ui hca UhjWU'`mfYWY]j Y'U'hjW\_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k ]``bYYX'hc'gdYWJZWU``mUg\_'Zcf'cbY'' Hi fb]hjb'U`gc'dfcj ]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'gfUhi g'cb'Hk]hYf"

; YbYfU`mžUggYgga YbhHUg\_g'a i ghVY`gi Va ]hhYX`Y`YWfcb]WU``mj ]U`Y]h\Yf`Hi fb]h]b`cf`U`A ccX`Y Ugg][ ba Ybh"`=b`]bgHUbWfg`k \YfY`h\]g`]g`bchdcgg]V`Yž`]hk ]```VY`gHUhYX`cb`mci f`Wci fgY**'**g`A ccX`Y`g]hY`k ]h\ U`hYfbUh]j Y`gi Va ]gg]cb`XYHU]`g"

### @UhY 5ggYgga Ybh DYbU h Yg

ł `G][ b]Z]WUbhmUZYWimci f`dYfZcfa UbWi`]b`UggYggUV`Y`k cf\_ž`VY`]hU`Zcfa U``YbX!cZigYa YghYf`YI Ua ]bUh]cbž`U WUgg`hYghž`U``UVcfUhcfmhYghž`U`gYa ]bUf`dfYgYbhUh]cb`cf`Ubmich\Yf`Zcfa `cZUggYgga Ybh'

: cf'Z fh\Yf'XYHJ]`g`]b`fY`UH]cb`rc`GdYW]U``7 cbg]XYfUH]cb`]bWi X]b[`''K \Yb`rc`5dd`mf'Z''<ck`rc`5dd`mf'UbX "Gi ddcfh]b[`8cW a YbHJh]cb"'d`YUgY`fYZYf'rc'h\Y`GdYW]U``7 cbg]XYfUH]cb`rk YVgh]Y.` \hhdg.##gh XYbH'i bgk "YXi "Ui #gdYW]U`!Wcbg]XYfUH]cb

### 5WUXYa ]W<cbYghmUbX^D`U[ ]Uf]ga

D`U[]Uf]ga `]g`i g]b[ 'h\Y`k cfXg`cf`]XYUg`cZch\Yfg`UbX`dfYgYbh]b[ 'h\Ya `Ug`mci f`ck b"`+i\WUb`hU\_Y`a Ubm Zcfa gžZfca `XY`]VYfUhY`W\YUh]b[ 'hc`UVW]XYbhU``mWcdm]b[ 'Zfca `U`gci fWf`k ]h\ci hUW\_bck `YX[ Ya Ybh'

IBGK '[fcidg'd`U[]Uf]ga ']bhc'h\Y'Zc``ck]b['WUhY[cf]Yg.

7 cdm]b[..i g]b['h\Y`gUa Y`cf`j Yfmig]a ]`Uf`k cfXg`hc`h\Y`cf][]bU``hYI h`cf`]XYU`k ]h\ci hUW\_bck `YX[]b['h\Y gci fWY`cf`i g]b['ei chUh]cb`a Uf\_g"`H\]g`U`gc`Udd`]Yg`hc`]a U[Ygž`Ufh`UbX`XYg][b`dfc`YWngž`Ug`k Y```Ug dfYgYbhUh]cbg`k \YfY`gca YcbY`dfYgYbhg`Ubch\Yf`g`]XYUg`cf`k cfXg`k]h\ci hWfYX]h"

=ðUddfcdf]UhY`dUfUd\fUg]b[.`W\Ub[]b[`U`ZYk`kcfXg`UbX`d\fUgYg`k\]`Y`acghmfYhU]b]b[`h\Y`cf][]bU` ghfi Whi fY`UbX`]bZcfa Uh]cb`k]h\ci hUW\_bck`YX[YaYbh''H\]g`U`gc`Udd`]Yg`]b`dfYgYbHUh]cbg`k\YfY`gcaYcbY dUfUd\fUgYg`Ubch\Yf`g`]XYUg`cf`kcfXg`k]h\ci hWfYX]h''=hU`gc`Udd`]Yg`hc`d]YW]b[`hc[Yh\Yf`ei chYg`UbX dUfUd\fUgYg`]bhc`U`bYk`k\c`Yž`k]h\ci hfYZYfYbW]b[`UbX`U`gh XYbhg`ckb`UbU`mg]g`hc`Vf]b[`h\Y`aUhYf]U` hc[Yh\Yf"

7 c``i g]cb. 'k cf\_]b[ 'k ]h 'ch Yfg'Vi hdUgg]b[ 'cZh Y'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'gh XYbhVYZcfY'h Y'Xi Y'XUhYzcf'Zcf'h Y'di fdcgY'cZh Ya d`U[ ]Uf]g]b[ 'UhUbmh]a Yž'dUm]b[ 'Ubch Yf'dYfgcb'hc'dYfZcfa 'Ub'UWUXYa ]WhUg\_ž'ghYU`]b[ 'cf'UWei ]f]b[ Ubch Yf'dYfgcb'g'UWUXYa ]Wk cf\_'UbX'Wcdm]b[ ']hz'cZYf]b[ 'hc'Wca d`YhY'Ubch Yf'dYfgcb'g'k cf\_'cf'gYY\_]b[ dUma YbhZcf'Wca d`Yh]b[ 'UWUXYa ]Wk cf\_''

=0Uddfcdf]UhY`W]hUh]cb.`7]h]b[`gcifWYg`k\]W\`\UjY`bchVYYb`fYUXžk]h\cihUW\_bck`YX[]b[`h\Y`″gYWcbXUfm´ gcifWY`Zfca`k\]W\`\_bck`YX[Y`cZh\Ya`\Ug`VYYb`cVhU]bYX"

8id`]\WUh]cb`fl`gY`ZId`U[]Uf]ga "Ł`gi Va]hhjb[`mcif`ckb`kcf\_ž`]b`k\c`Y`cf`]b`dUfhž`k\YfY`]h\Ug`dfYj]cig`m VYYb`dfYdUfYX`cf`gi Va]hhYX`Zcf`Ubch\Yf`UggYggaYbhcf`\\circf`Ucil BGK `cf`Ubch\Yf`ib]jYfg]hm"

7 cffYWhifYZYfYbWjb[ dfUWhjWYg.

- DUfUd\fUg]b[žgi a a Uf]g]b[žYggUmk f]h]b[ 'UbX'h]a Ya UbU[Ya Ybh
- •

- VYHYfaUbU[Y'mcifh]aY
- i bXYfghUbXimci f`f][ \hg`UbXifYgdcbg]V]`]h]Yg`Ug`U'ghi XYbhUhil BGK
  VY`Uk UfY`cZd`U[ ]Uf]ga žWcdmf][ \hžI BGK `Ghi XYbhi7cXY`cZ7cbXi WhUbX`5WWrdhUV`Y`I gY`cZ I BGK `=7 H`F Ygci fWrg`Dc`]Wh

## ανεsβοσf7**7 οἑβαγċGM**λ!ΥδΛά`Υ

### <u>J]Yk WUgg'ha YHJV'Y</u>

## H]a YHJV`Y'

8 UHY	Hmd Y	7 c bhYbh
K YY_`%`&*`:		7@5GG.K 98B9G85M+!-DA
a ufvx		
		Hcd]W∶=bhfcXiWhjcbi∕ K∖UhiUfYih∖Y`[cU`gʻcZ

		F958=B; G
		6UIžG"'f&\$\$' Ł"'H\Y'YbX'cZ7@H.'5'WcbHYIh UddfcUWX'hc'`Ub[iU[Y'HYUWX]b["'7>F <agd`s^) +fiłž<br="">&amp;+, !&amp;, +"'fH\]g']g'Ba[`fS`V 5ag`fWcba[`f'gc'H\YfY UfY'U`gc'hk c'g\cfHYf'fYd`]Yg'hc'H\]g'UfHWYž'Vm &lt; Ufa Yf'UbX'6UI "Ł</agd`s^)>
		> <b>]bž@"`UbX`A"`7cfrUnn]</b> `f&\$\$*½"`7\Ub[]b[`dfUWrJWYg ]b`7\]bYgY`W``hifYg`cZ`YUfb]b["`>S` YgSYW/5g/fgdW S`V5gdd[Ug^g_`%f%Łž`)!&\$"
		<iź; "`f&\$\$)="" cbhylhiu``]bziybw¥g`cb<br="" ł"`7="">]bghfiW4]cbU``dfUW4]W¥g.`5`7 \]bYgY`WUgY`Zcf`Ub YWc`c[]WU``UddfcUWX`hc`9@H"`F7EA &gt; CgSdfWd4k '-f('Łž*')!**\$"</iź;>
		<iiž; "`f&\$\$&{"`dchybh]u``w\`hifu``fyg]ghubwy`hc<br="">dYXU[c[]WU``]adcfhg.`H\Y`WUgY`cZWcaaib]WUh]jY `Ub[iU[Y`hYUW\]b[`]b`7\]bU"`&gt;S`YgSYWI5g`fgdWS`V 5gdd[Ug`g_`%)f&amp;Łž`-'!%\$)"</iiž;>
K_YY_'' . `%&`A_UfWX`!`%	GYa ]bUf	7@5GG. K 98B9G85M+!-DA
A UfVX		HCD=7. <b>`K\Uh`]g`h\Y`V][[Yf`d]Wh`fY3</b> `FZWba*[f[Ue aX*S`YgSYWfW\$UZ[`Y
		F958-₿; G
		GibicXi`UžA"7':Yb[`5"f&\$%%2"@YUfb]b[ 9b[`]g\`Ug`U'f\]fX``Ub[iU[Y`VmIm[\if`ghiXYbhg`]b L]b^Ub[`5`V`Ygg]b[`]b`X]g[i]gY3`=b`5"':Yb[`f9X"2 7`Y^[eZ 'S`YgSYWWWgUSf[a`SUdaeeYdWSfWd5Z[`Sł dd"&*\$!&,'ž6f]ghc`žAi`f]`]b[iU``AUffYfg"
		DYbbmWcc_ž5""UbX`7ciHUbX!AUf]bžG""f&\$%\$Ł" HYUWX]b[`9b[`]g\`Ug`U`A]gg]cbUfm@Ub[iU[Y" 6[eUag&WEfgV[We[`fZW5gfgdS^Ba{ff[UeaX 7VgUSf[a``&(flŁž''+!')'
		<b>? Ufa Ub]žG</b> "`f&\$\$) Ł"`DYŀfc!`]b[ii]gh]Wg.`H\Y Ya Yf[]b[`bYIig`VYfk YYb`c]`ž9b[`]g\žUbX`=g`Ua"` <agd`s^ax>S`YgSY₩;VW f[fk S`V 7VgUSf[a`ł`(f&amp;Ł , +!%\$&amp;"</agd`s^ax>
K_YY_`(,`%-`A_UfVX`!`&)	GYa ]bUf	7@5GG. K 98B9G85M+!-DA
a ufvx		HC D <i>=</i> 7.

	K ∖c`]g`h\Y`hYUW\Yf3`DUfh`%%/FWSUZWd[VW`f[fk S`V ^WY[f[_ SUkŁ
	F958-₿; G
	< <b>c``]XUmž5</b> "f&\$\$)と <ck`∉j`≢idcgg]v`y`hc`kf]hy3 <agd`s^ax>S`YgSYW;VWf[fk` 7VgUSf[a`/&amp;f(. '\$(!'\$-"</agd`s^ax></ck`∉j`≢idcgg]v`y`hc`kf]hy3 
	Gcb[ž>"'f&\$%*Ł"'9ach]cbg'UbX``Ub[iU[Y'hYUW\Yf ]XYbh]hm`7cbZ]Wgžji`bYfUV]`]hmž'UbX'hfUbgZcfaUh]cb"' F7EA > CgSdfWdk' "#.'*'%I*)("
	<b>6U]`Ymž? "</b> `f&\$\$* Ł"`A Uf_Yh]b[ 'h\Y`W] S[i S k cbXYf`UbX. '¥Yc`c[ mžS] aYSdWžUbX`[ YbXYf`U`hYf]hm ]b`9b[ `]g\`Wcbj YfgUh]cb`gW\cc``UXj Yfh]g]b[ `]b`>UdUb" 9bj ]fcba YbhUbX`D`Ubb]b[ `8. `GcW]YhmUbX`GdUWY" &(`%\$) !% \$"

		&) % &* , "
		<b>7cc_žJ"</b> "f&\$%*Ł""K\YfY"]g"h\Y"bUh]jY"gdYU_Yf"bck3 F7EA>CgSd™Md1k''"#%"
		<b>?iaUfUjUX]jY`iž'6"</b> `f&\$%*Ł"`H\Y`8YWc`cb]U``Cdh]cb ]b`9b[`]g\`HYUW\]b[.`7Ub`h\Y`GiVU`hYfb`5W43 H9GC@EiUfhYf`mž')\$#%"
		FiYW_YfžH"'/ `+jYgž@"`f&\$%) Ł"`K \]hY`bUhjY`9b[`]g\ gdYU_Yfg`bYYXYX.`H\Y`f\Yhcf]WU``WcbghfiWh]cb`cZ df]j]`Y[Y`]b`cb`]bY`hYUW\Yf`fYWfi]haYbh`gdUWYg"` F7EA > CgSdfWdAk&+#("
6fYU`&`5df]``!`, `5df]`	Hcd]W	D@95G9'BCH9.'BC'7@5GG'H< €'K 99?'.Ł'
K YY_`*.'- '5df]`!'%) '5df]`		7@5GG.K 98B9G85M+!-DA
		HCD=7.°< <b>ck `Xc`kY`hYUWX3</b> °?WfZaVa^aYkS`V fZW WVVaX_WfZaVe
		<b>?iaUfUjUX]jY`i</b> ł4ž/\$" "(fžF7EA > ? WfZaVe,
		5 ZS`Y[YfdSU]eł UZS^WYY[YfdW/VežF7EA > CgSdfWd/kł&"/#fi'+Ž*#ž
		HiXcfž="&\$\$' "@YUfb]b['hc``]jY'k]h\Wead`YI]hm hckUfXg'Ub'YWe`c[]WU`dYfgdYWf]Y'cb``Ub[iU[Y hYUW\]b["'EkefW_{'' %Z'%]%&"
		<i `6i="" a="" d\f]ygžg"="" fbgž5"`f&\$%)="" ど"``+b`fyu`]mi]hg<br="">U`a cgh]a dcgg]V`Y'. `7 @H!cf]YbHYX`Wiff]Wi`i a W\Ub[ Y"`7 &gt;F <agd "<="" +="" ,="" -!&(="" fl="" s^(="" td="" と`&'=""></agd></i>
		K UhYfgž5`f&\$‰Ł"`HfYbXg`UbX`]ggi Yg`]b`9@H a Yt\cXg`UbX`a Yt\cXc`c[m"`7>F <agd s^<br="">((f{Ł`((\$!((-"</agd>
K YY_`+.`%*`5df]`!`&&	GYa ]bUf	7@5GG. K 98B9G85M+!-DA
5df]`		HCD=7.` <ck`ufy`ky`eiu`]z]yx3`>S`YgSYWfW\$UZWd WVgUSf[a`S`VbdaWee[a`S^VWhWab_Wf</ck`ufy`ky`eiu`]z]yx3`>
		< <b>cVVgžJ "</b> f&\$% Ł" '5 VUg]WgłUfhYf dUW <u>'</u> . h\Y H9GC @7Yfh]ZWUhY Ug U Wci fgY ]b gi fj ]j U " 7 >F <agd !%+(="" "<="" %*'="" +="" f&ł="" s^*="" td=""></agd>
		5bXYfgcbž>"`f&\$%*と"`=む]h]U``hYUV&Yf`hfU]b]b[ WcifgYg`UbX`bcb!bUh]jY`gdYU_Yf`hYUV&Yfg"`7>F <agd`s^) "flと`&*%&+("<="" td=""></agd`s^)>
I	I	I I

		GHUb`YmžD"'/ `A i ffUmžB"'f&\$% Ł"''E i U`]ZJYX3''5 ZFUa Yk cf_`Zcf`Wca dUf]b[ `9@H`hYUWXYf`dfYdUfUh]cb Wci fgYg"`3gefd51{S` DWh[Wi aX3bb1{WW >[`Yg[ef[Ue %(#%`%\$&!%%)"
		AcfUbžD"F""f%*E"''=a bchimd]WU`'. Ghcf]Yg'cZ VYWca]b['U`GdUb]g\'HYUW\Yf"`=b`8"`: fYYaUb`UbX`>" 7"`F]W\UfXg`f9Xg"EFWSUZWdWSd[`Y[` S`YgSYW fWSUZ[`Yłdd"%&)!%)'"`7UaVf]X[Y.`7ID"
K YY_`, .`&' `5df]`'!`&- 5df]`	Cb`]bY`5WAjj]hm	H< 9F 9 °=6 °BC °7 @5GG °CB °K 98B9G85M&) H< 5DF =@ 5G °=H °=6 °5BN57 °85M" D@95G9 °EG °H< =6 °K 99? °HC °F9J =9K °H< 9
		7CIFG9'A5H9F-5@G'5B8'F958=B;G"
K YY_''' \$`5df]`'!`*`A Um	GYa ]bUf	7@5GG. K 98B9G85M+!-DA
		HCD=7. `K \UhiXc`kY`Xc`]b`WUgg`fdUfh`%Ł3` FWSUZ[`Y_SfWd[S^eS`VfWSUZ[`Y_g`b^gYYW
		F]WXUfXgž'>"'7"'f‰-, Ł"'HYIhVcc_g.' <y`d`cf \]bXfUbWY`]b'HYUVX]b[3'€)'&gt;"'7"'F]WXUfXg`f9X"Ł' 4Wka`VfdS[`[`Yž'dd"‰)!%)&amp;"'7UaVf]X[Y.'7ID"</y`d`cf 
		<b>A YXX]b[gž@"`UbX`H∖cfbVi fmžG"</b> `f&\$\$-Ł"`FWSUZ[`Y G`b^gYYW, 6aY_W[`7`Y√[eZ>S`YgSYWFWSUZ[`Y" DYUg`U_Y`I?.`8Y`HJ"`f9IhfU₩4±"
		G]Y[Y`ž′5"`f&\$%(Ł"`K∖Uh′g\ci`X`kY`hU`_`UVcih3`H\Y Uih\Ybh]W]micZhYIhVcc_`hcd]Wg"`7>F <agd`s^ (*f(Ł`'*'!'+)"</agd`s^ 
K_YY_`%\$.`+`A_Um'!`%'	GYa ]bUf	7@5GG. K 98B9G85M+!-DA
A Um		HCD <i>=</i> 7.°K \UhiXc°kY°Xc°]b°WUgg°fdUfh &L3°°FWSUZ[`YYdSSd_ad`af1
		: ][ <b>i YfUgžB"</b> `f&\$%&Ł"`H\Y`]a dUWtcZt\Y`79: F"`7>F <agd f(ł`(++!(,)"<="" s^((="" td=""></agd>
		Gk UbžA "`f&\$\$&Ł"`GYj Yb`VUX`fYUgcbg`Zcf`hYUW\]b[ [fUa a Uf`—`UbX`hk c`[ccX`cbYg"`=b`>"`7 "`F]W\UfXg UbX`K "`5"`FYbUbXmU`f9Xg"Ł? WfZaVa'aYk [ 'S` YgSYWfW\$UZ[`Y, 3` S`fZa'aYk aXUgdWV f bd\$Uf[UW'dd"`%(,!%)&" 7Ua Vf]X[Y.`71 D"
		<b>@UfgYb!: fYYa Ubž'8"</b> "f&\$\$' Ł""HYUW&]b[ "`Ub[i U[Y. : fca `[fUa a Uf"hc`[fUa a Uf]b[""6cghcb.` <y]b`y" fPI hfUWhz"</y]b`y" 

K_YY_*%%*%(*A_Um!*&\$	GYa ]bUf	7@5GG.K 98B9G85M+!-DA
A Um		HCD <i>=</i> 7. <b>`K \UhXc`kY`Xc`]b`WUgg`fdUfh' Ł3</b> `FZW fWSUZ[`Y aXUg <i>*</i> fgdW
		GHUb`YmžD"'f&\$%+Ł"'H\Ycf]n]b[']bHYfW`HifU` WcadYHYbWY"'7\UdHYf&cZ3Ud(f[US^ Sgfa!WfZ`aYdSbZkaX1WSd[`YEbS`[eZ,;`fWdUg1fgdS^ Ua_bWfW`UWa`fZW[f]b[cfdS[115V]b[Xcb7'BYk Mcf'FcihYX[Y"
		< <b>c``]XUmž`5</b> "'f&\$\$-Ł"'H\Y'fc`Y'cZW``hifY']b'9b[`]g\ `Ub[iU[Y'hYUW\]b[.'?Ym'W\U``Yb[Yg"'>S`YgSYWS`V ;`fWdJg/fgdS^5ag`[USf[a`'-flŁž'%((!%))"
		5h_]bgcbž7 Gc\bž>"

H9GC@aYh\cXc`c[]Yg.`6i]`X]b[`d`if]`]b[iU` dYXU[c[]Yg`Zca`h\Y`[fcibX`id"`F7EA > CgSdfWd1k
&) # . <sup>•</sup> ) &%d ) ( ) "

### FYgci fWg

### DfYgWf]VYX F Ygci fWYg

D`YUgY`gYY`gYgg]cb!Vm'gYgg]cb``]ghcZfYUX]b[ g/U```UfY`Uj U]`UV`Y`cb`A ccX`Y"

### FYWca a YbXYX<sup>-</sup>FYgci fWYg

D`YUgY`gYY`gYgg]cb!Vm'gYgg]cb``]ghcZfYUX]b[ g/U```UfY`Uj U]`UV`Y`cb`A ccX`Y"

### 7 ci fgY 9j U`i Uhjcb UbX 8 Yj Y`cda Ybh

H\]g:WcifgY:YIUa]bYg:WcbhYadcfUfm]ggiYg:]b:9b[`]g\``Ub[Ui[Y:hYUWX]b[`UbXžhcigHUmfWcbhYadcfUfmfži]h ]g:WcbgHUbhmidXUhYX"::cfih.]g:fYUgcbžmciik]```Z]bX:fYUX]b[g:ZfcaijYfmfYWfbhmYUfg:UbX:Ub'YjYf!Yjcj]b[ `]ghcZhcd]WgžXYdYbX]b[`cb'WiffYbhXYVUhYg']b:H9GC@Ug'Ub'UWUXYa]WX]gW]d`]bY"

H\Y'WcifgY']g'U`gc'i dXUhYX'UbX'acX]ZJYX'UbbiU``m]b'fYgdcbgY'hc'ghiXYbhgfifYgdcbgYgždfYZ'ffYX'hcd]Wgž UbX'h\Y'WcbhYbhH\Uh'\Ug'VYYb'igYZ ``UbX']bhYfYgh]b[']b']b!WUgg'gYgg]cbg'': YYXVUW\_'Zfca'ghiXYbhg`]g [Uh\YfYX'ZcfaUh]jY`mfY''[''']b!WUgg'a]bihY'dUdYfg'UbX'X]gW gg]cbgE'UbX'giaaUh]jY`mff\fci[\