

# MTRN4110

FcVch8Yg][b

HYfa "Hk c ""## "&\$&%

# 7ci fgY<sup>·</sup>Cj Yfj ]Yk

# GHJZZ7cbHJWh78YHJ]`g

7cbj Ybcfg

### 9a U]`

<u>9b[]bYYf]b[ 'Gh XYbhGi ddcfhGYfj ]Wg</u> - W ffYbhgh XYbhYbei ]f]Yg

• Y"["'Ybfc`a Ybhž'dfc[fYgg]cbž'WUg\'fYei Yghgž'Wci fgY`]ggi Yg'cf'dfc[fUa !fY`UhYX'ei Yf]Yg

<u>9b[]bYYf]b[`⊕Xi glf]U`HfU]b]b[</u>`–`⊕Xi glf]U`'HfU]b]b[`ei Ygh]cbg

- I BGK Gh Xm5VfcUX gh XmUVfcUX gh XYbhYbei ]f]Yg fZcf ]bVci bX gh XYbhgŁ
- I BGK '9I W.Ub[Y'-ghi XYbhYI W.Ub[Y'Ybei ]f]Yg'fZcf']bVci bX'ghi XYbhgŁ
- <u>I BGK : i h fY Gh XYbhg</u> dchYbhJU gh XYbhYbei ]f]Yg

# 7ci fgY<sup>·</sup>8YHJ]`g

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

### Gi a a UfmcZhXY7ci fgY

H\Y'Wci fgY']g'U]a YX'UhXYj Y`cd]b['g\_]``g'cb`\ck 'hc'XYg][ b'UbX']a d`Ya Ybhih\Y'WUdUV]`]h]Yg'cZU'fcVch]W d`UhZcfa "`<U`ZcZh\Y'Wci fgY`]g``YWi fY!VUgYX'UbX'XYU`g'k]h\'h\Y'Zc``ck]b['WcbhYbhg.`=bffcXi Wf]cb'hc'fcVch XYg][ b''A YW\Ub]ga g`UbX'\_]bYa Uh]WcZk \YY`YX'fcVchg'''GYbgcfg'i gYX'Zcf'h\Y'dYfW'dh]cb'WUdUV]`]h]Yg'cZ h\Y'fcVch''DYfW'dh]cb'Udd`]YX'hc'U``ck 'h\Y'fcVchhc'i bXYfghUbX'h\Y'WcbhYI hcZcdYfUh]cb'''A ch]cb'd`Ubb]b[ UbX'Wcbhfc``cZh\Y'fcVch]b'Wca d`YI 'WcbhYI hg''Cdh]a U`d`Ubb]b['f8mbUa]WDfc[fUa a]b['UddfcUW\Ł''

=b<sup>·</sup>h∖Y`dfUWjWU``WcadcbYbhcZh\Y`WcifgYžh\Y`ghiXYbhg`]ad`YaYbhdYfWYdh]cb`UbX`Wcbhfc``acXi`Yg`UbX hYghih\Ya`]b`UWniU``fcVchg"

7 ci fgY<sup>-</sup>5]a g

H\]gʻWcifgYʻYbUV`YgʻghiXYbhgʻhcʻYId`cfYʻfYʻYjUbhUgdYWngʻcZUihcbcacigʻfcVch]WgmghYag"`H\YgY`]bWiXY h\Y`]ad`YaYbhUh]cb`cZZibWn]cbgʻgiW\`UgʻgY`YWn]b[žibXYfghUbX]b[ž'UbX`]bghU``]b[`h\Y`gYbg]b[`WUdUV]`]h]Yg cZh\Y`fcVchždfcWYgg]b[`cZh\Y`gYbgcf`aYUgifYaYbhgʻZcf`dYfZcfa]b[`dYfWYdh]cbž'UbX`Udd`m]b[``ck!`UbX \][\!`YjY`Wcbhfc``dfcWYggYgʻhc`YbUV`Y`h\Y`fcVch]Wd`UhZcfa`hc`cdYfUhY`]b`Wcad`YI`WcbhYIhg"

H\]gʻWci fgYʻU``ck gʻghi XYbhgʻhcʻUdd`mh\YʻWcbWYdhgʻ]bhfcXi WYX`]bʻh\YʻWci fgYž]bʻWca V]bUh]cbʻk ]h\ dfYj ]ci g`mUWei ]fYX`\_bck `YX[ Y`f2fca ʻgi VʻYWfg`fY`UhYX'hcʻDfc[ fUa a ]b[ žA Uh\Ya Uh]Vgž7 cbhfc`ž A YVXUb]Vgž9`YWffcb]VgHž']bʻcfXYf`hcʻgc`j Y`h\Y`Vca d`YI `Wci fgY`dfcʻYWfgʻh\Uh']bj c`j Y`hUg\_gʻgi W.`Ugʻh\Y`Z ``XYg][ b`UbX`]a d`Ya YbhUh]cbʻcZUʻga U```fcVch]Wd`UhZcfa `hc`[ ]j Y`]hh\Y`]bhY``][ YbWY`hcʻcdYfUhY`]b`Ubʻi b\_bck b WcbhYI h'`H\Y`]bhY``][ YbWY`cZh\Y`d`UhZcfa `]bj c`j YgʻdYfZcfa ]b[ `dYfWYdh]cbʻhUg\_gʻgi W.`UgʻcVghUWY`XYhYWf]cbž a Udd]b[ žd`Ubb]b[ `UbX`j ]gi U`]nUh]cbʻZcf`\i a Ub`]bhYfUWf]cbʻk ]h\`h\Y`]bhY``][ YbhU[ Ybh'5``h\YgY Wca dcbYbhgʻcZh\Y`U[ YbhUfY`]a d`Ya YbhYX'Vmh\Y`ghi XYbhg''

### 7cifgY`@YUfb]b[`CiHWcaYg

5ZhYfigi VWVggZ ``mWcad`Yhjb[ h\]giWcifgYžmci ig\ci `XiVYiUV`Yihc.

@YUfb]b[`CiHWcaY	95 GHJ[Y % 7ca dYhYbW]Yg
%"5dd`mfY`YjUbhih\YcfYhJWU``_bck`YX[Y`dYffU]b]b[`hc`acV]`Y fcVchg`]bWiX]b[``cWcach]cbždYfWYdh]cb`UbX``cWU`]nUh]cb`ih]`]g]b[ cbVcUfX`gYbgcfgžbUj][Uh]cb`UbX`dUh\`d`Ubb]b[žZcf`Wcad`YI dfcV`Ya!gc`j]b[	D9%"%

# 5ggYgga Ybh

## 5ggYgga YbhHUg\_g

5ggYgga Ybh'HJg_	K Y][ \h	8iY'8UHY	GhiXYbhi@YUfb]b[ CihWcaYgʻ5ggYggYX
Ei]n	()।	K YY_`&ž`( ž +ž - ž %\$	%ž`&
ŧ∂X]j ]Xi U`Dfc Y₩i	'*	K_YY_`( ž +ž %\$	%ž`&ž`'
;fcid`DfcYWhi	%- I	K YY_'%	%ž' &ž' ' Ž' (

### 5ggYgga Ybh8YHJ]`g

5ggYgga Ybh% Ei]n

GHJfhXUhY. K YY\_&ž(ž+ž-ž%\$

@Yb[h\.'| d'hc'' \$'a]bi h/g

#### 8 YHJ]`g.

8Yg₩f]dh]cb.

"Ei]nnYg`cb`[YbYfU``h\Ycf]Yg`cZacV]`Y`fcVchg`UbX`WcadihYf`j]g]cb`h\Uh'UfY`WcjYfYX`]b``YWifYg"

Bia VYfcZUggYgga Ybhg.

``: ]j Y ei ]nnYg ]b hchu`"

; fci d#bX]j]Xi U`.

∵ŧ∋X]j]Xi U`

5ggYgga Ybh₩f]hYf]U.

"Ei]nnYg'UfY'cb`]bY'j]U'AccX`Y'Ei]n'UWfj]hm"

8YUX`]bY'Zcf'UVgc`i hY'ZJ]`.

¨В#5

FY`YUgY'cZa Uf\_g.

``K\_]h\]b`%'kYY\_`cZh\Y`hYgh'XUhY"

Gi Va ]gg]cb bchYg. j ]U A ccX Y

Hi fb]h]b`gYh]b[.`H\]g`]g`bchU`Hi fb]h]b`Ugg][ ba Ybh

5ggYgga Ybh& ⊕X]j ]Xi U`Dfc YWh

GHJfh'XUhY. K YY\_'%Ž'(Ž+

8YHJ]`g.

8Yg₩f]dh]cb.

``5gg][ba Ybhg`ZcWg]b[`cb`X]ZYfYbhUgdYWg`fY`Yj Ubhhc`fcVchXYg][b"

Bia VYfcZUggYgga Ybhg.

"H\fYY'Ugg][baYbhg']b'hchU'"

; fci d#bX]j]Xi U`.

∵∎bX]j]Xi U`

5ggYgga YbhWf]hYf]U.

"FYZYf"hc"YUW\"Ugg][baYbhXYg₩f]dh]cb"

8YUX`]bY'Zcf'UVgc`i hY'ZJ]`.

···) \$`\cifg`UZYf`h\Y`XiY`XUHY`fYUW\``UHY`\cif`fYXiWYg`h\Y`aUI]aia`UW\]YjUV`Y`aUf\_g`Vm&ı Ł"

FY`YUgY'cZaUf\_g.

₩ %o \$ Y

···C bY 'Ugg][ ba Ybh']b 'hc hU`"

; fcid#bX]j]XiU`.

# 5HYbXUbWYFYei]fYaYbhg

# FYgci fWfg

#### FYWca a YbXYX FYgci fWYg

@YWiffY`bchYg`UbX`Ugg][baYbhgdYW]2]WUh]cbg`k]``VY`UjU]`UV`Y`hc`ghiXYbhg`j]U`HYUag"

H\YfY`k]```VY`bc`hYI hVcc\_`fYei]fYX`Zcf`h\]g`Wci fgY"`H\Y`ghi XYbhg`UfY`gi [[YghYX`hc`fYUX`h\Y`Zc``ck]b[`]Z h\Ymik Ubh'hc`YI dUbX`h\Y]f``YUfb]b[.

• F"G]Y[kUfhž="F"BcifVU\_\g\ž8"GWUfUainnU" =bhfcXiWhjcbhc"Uihcbcacig`acV]`YfcVchg"H\YA =H DfYgg"GYWcbX'YX]hjcb" &\$%%

IBGK `@]VfUfmikYVg]hY.`\hhdg.#kkk"`]VfUfmiibgk"YXi"Ui# AccX`Y.`\hhdg.#accX`Y"hY`hiibgk"YXi"Ui#c[]b#bXYI"d\d

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

: YYXVUW\_cbihY'WcifgY']g`[UhYfYX'dYf]cX]WU``mig]b['jUf]cig`aYUbgž]bWiX]b['hY'IBGK a m9IdYf]YbW'dfcWYggž]bZcfaU``X]gW gg]cbi]b'hY'Z]bU`'WUgg'Zcf'hY'WcifgYžUbX'hY'GW.cc''g GhiXYbh#GhUZZaYYh]b[g"'Mcif'ZYYXVUW\_']g'hU\_Yb'gYf]cig`mžUbX'Wcbh]biU``]adfcjYaYbhg'UfY'aUXY'hc'h\Y WcifgY'VUgYXž]b'dUfhžcb'giW.'ZYYXVUW\_"

# Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

### 5ggYgga Ybhigi Va ]gg]cb UbX a Uf\_]b[ Wf]hYf]U

G\ci`X'h\Y`WcifgY`\UjY`Ubmbcb!Y`YWfcb]WUggYggaYbhigiVa]gg]cbžh\YgY`g\ci`X`\UjY`U`ghUbXUfX GW\cc``WcjYf`g\YYh'

5```gi Va]gg]cbg`UfY`YI dYWYX`hc`VY`bYUhUbX`WYUf`migYhci h'`Mci f`fYgi `hg`UfY`h\Y`d]bbUWY`cZU```mci f`\UfX k cf\_`UbX`g\ci `X`VY`hfYUhYX`k]h\`Xi Y`fYgdYWf`DfYgYbh]b[`fYgi `hg`WYUf`mi[]j Yg`h\Y`a Uf\_Yf`h\Y`VYghW\UbVW cZi bXYfgHUbX]b[`mci f`a Yh\cX/Yj Yb`]Zh\Y`bi a Yf]WU``fYgi `hg`UfY`]bWcffYWf

A Uf\_]b[ `[ i ]XY`]bYg'Zcf'Ugg][ ba Ybhgi Va ]gg]cbg'k ]```VY'dfcj ]XYX'Uhih\Y'gUa Y'h]a Y'Ug'Ugg][ ba YbhXYhJ]`g hc'Ugg]ghik ]h\`a YYh]b[ 'UggYggUV`Y'fYei ]fYa Ybhg"'Gi Va ]gg]cbg'k ]``'VY'a Uf\_YX'UWWcfX]b[ 'hc'h\Y'a Uf\_]b[ [ i ]XY`]bYg'dfcj ]XYX"

#### @UhY`dc`]Wm

K cf\_`gi Va ]hhYX``UhY`k ]h\ci hUb`Uddfcj YX`YI hYbg]cb`Vmh\Y`Wci fgY`WccfX]bUhcf`cf`XY`Y[ UhYX`Ui h\cf]hm]g gi VYWhc`U``UhY`dYbU`hmcZ`&\$`dYfWYbhf&\$i Ł`cZh\Y`a UI ]a i a `a Uf\_`dcgg]V`Y`Zcf`h\UhUggYgga Ybh`]hYa ž dYf`WU`YbXUf`XUm'

H\Y``UhY`dYbU`hm`]g`Udd`]YX`dYf`WU`YbXUf`XUmf]bWi X]b[`kYY\_YbXg`UbX`di V`]W\c`]XUmgEh\Uhh\Y UggYgga Ybh`]g`cj YfXi Y"`H\YfY`]g`bc`dfc!fUhU`cZh\Y``UhY`dYbU`hmZcf`gi Va ]gg]cbg`a UXY`dUfhk Umh\fci [\`U XUm'

K cf\_`gi Va ]hhYX`UZhYf`h\Y`'XYUX`]bY`Zcf`UVgc`i hY`ZU]`'`]g`bchUVWYdhYX`UbX`U`a Uf\_`cZnYfc`k ]```VY`Uk UfXYX Zcf`h\UhUggYgga Ybh`]hYa "

: cf`gca Y`UggYgga Ybh`]hYa gžU``UhY`dYbU`hma UmbchVY`Uddfcdf]UhY"`H\YgY`UfY`WYUf`m`]bX]WUhYX`]b`h\Y Wci fgY`ci h`]bYžUbX`gi W\`UggYgga Ybhg`fYWY]jY`U`a Uf\_`cZnYfc`]ZbchWca d`YhYX`Vmh\Y`gdYW]2JYX`XUhY" 9I Ua d`Yg`]bWi XY.

%" K YY\_`mcb`]bY`hYghg`cf``UVcfUhcfmk cf\_`k cfh``U`ga U```dfcdcfh]cb`cZh\Y`gi VYWha Uf\_žcf

- &" C b`]bY'ei ]nnYg'k \YfY'Ubgk Yfg'UfY'fY`YUgYX'hc'ghi XYbhg'cb'Wca d`Yh]cbžcf
- ' " DfcZYgg]cbU``UggYgga YbhHUg\_gžk \YfY`h\Y`]bhYbh]cb`]g`hc`WfYUhY`Ub`Ui h\Ybh]WUggYgga YbhH\Uh \Ug`Ub`UVgc`i hY`gi Va`]gg]cb`XUhYžcf
- ("DUgg#U]~UggYggaYbhHJg\_g"

#### 91 Ua ]bUh]cbg

Mci 'a i ghVY'Uj Uj'UV'Y'Zcf'U```ei ]nnYgž'hYghgʻUbX'YI Ua ]bUhJcbg":: cf'Wci fgYg'h\Uh\Uj Y'ZJbU``YI Ua ]bUhJcbgž h\YgY'UfY`\Y`X'Xi f]b[ 'h\Y'I b]j Yfg]hmYI Ua ]bUhJcb'dYf]cXg.': YVfi UfmZcf'Gi a a Yf'HYfa ž'A UmZcf'H%ž 5i [ i ghZcf'H&ž'UbX'Bcj Ya VYf#8YWYa VYf'Zcf'H' "

D`YUgY`j]g]ha ml BGK `Zcf`Dfcj]g]cbU``9I Ua]bUh]cb`h]a YHUV`Y`di V`]g\`XUhYg'': cf`Z fh\Yf`]bZcfa Uh]cb`cb YI Ua gžd`YUgY`gYY`h\Y`<u>9I Ua g</u>`k YVdU[ Y''

#### GdYWJU``7cbg]XYfUh]cb

Zmci `\Uj Y`YI dYf]Yb₩X`Ub`]``bYgg`cf`a ]gUXj Ybh fY`VYmcbX`mci f`Wcbhfc``h\Uhik ]```]bhYfZYfY`k ]h\`mci f

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

IBGK `\Ug`Ub`cb[c]b[`Wcaa]haYbhhc`ZcghYf]b[`U`W`hifY`cZ`YUfb]b[`]bZcfaYX`VmUWUXYa]W]bhY[f]mi`5`` IBGK `ghiXYbhg`\UjY`U`fYgdcbg]V]`]mhc`UX\YfY`hc`h\]g`df]bW]d`Y`cZUWUXYa]W]bhY[f]mi`D`U[]Uf]ga ibXYfa]bYg`UWUXYa]W]bhY[f]miUbX`]g`bchhc`YfUhYX`UhIBGK "`B'SY[Sde\_SfG@EI[eVW{`WVSege[`Y fZWiadVead[VWSeaXafZWdeS`V bSee[`YfZW\_aXSekagdai`ž

D`U[]Uf]ga `]g`U`ImdY`cZ]bhY``YWi U``I\YZI'' =I`WUb`IU\_Y`a UbmZcfa gžZica `XY`]VYfUhY`W\YUh]b[`Ic`UVW]XYbHJ``m Vcdm]b[`Zica `U`gci fW'`k]I\ci hUV\_bck`YX[Ya Ybh'`I BGK `\Ug`dfcXi VYX`U`k YVg]HY`k]I\`U`k YU`h\`cZ fYgci fWfg`Ic`gi ddcfhigh XYbhg`Ic`i bXYfgHJbX`UbX`Uj c]X`d`U[]Uf]ga žj]g]h`ghi XYbh'i bgk "YXi "Ui #d`U[]Uf]ga " H\Y`@YUfb]b[`7Ybh'fY`Ugg]ghg`ghi XYbhg`k]I\`i bXYfgHJbX]b[`UWJXYa]W]bH'[f]hmUbX`\ck`bchIc`d`U[]Uf]gY" H\YmU`gc`\c`X`k cf\_g\cdg`UbX`WJb`\Y`d`ghi XYbhg`cbY!cb!cbY"

Mci 'UfY'U`gc'fYa ]bXYX'H\UhWUfYZ ``Ha Y'a UbU[ Ya Ybh]g'Ub']a dcffUbhdUfhcZgh XmUbX'cbY'cZh\Y ]XYbh]ZJYX'WUi gYg'cZd`U[ ]Uf]ga ']g'dccf'Ha Y'a UbU[ Ya Ybh''Gh XYbhg'g\ci `X'U``ck 'gi ZZJWJYbhHa Y'Zcf fYgYUfV\zxfUZfb[ 'UbX'H\Y'dfcdYf'fYZYfYbV]b[ 'cZgci fWfg']b'dfYdUf]b[ 'U```UggYgga YbhHug\_g''

Zd`U[]Uf]ga `]g`Zci bX`]b`mci f`k cf\_`k \Yb`mci `UfY`]b`ZjfghmYUfžmci f``YWi fYf`k]```cZYf`mci `Ugg]gHUbWY`hc ]a dfcj Y`mci f`UWUXYa]Wg\_]``g"`H\Yma UmUg\_`mci `hc``cc\_`Uhigca Y`cb`]bY`fYgci fWYgžUhhYbX`h\Y`@YUfb]b[ 7YbhYyžcf`gca Yhja Yg`fYgi Va]hmci f`k cf\_`k]h\Y`dfcV`Ya `ZjI YX'''<ck Yj Yf`a cfY`gYf]ci g`]bgHUbWYg`]b`Zjfgh

c 'fY

‰

# 5₩UXYa]W=bZcfaUh]cb

# 7 fYX]hdc]bhg

7 ci fgY`WYX]hi]g`WU`W``UhYX`]b`I b]hg!CZ7fYX]hfI C7Ł"`H\Y`bcfa U``kcf\_`cUX`YI dYWUh]cb`Zcf`cbY`I C7

- <u>A ccX`Y</u>
- <u>@UV`5\WWgg</u>
- <u>7 ca di hb[ : UW)]h</u>Yg
- <u>Ghi XYbh F Ygci fWg</u>
- <u>7 ci fgY Ci h]bYg</u>
- : <u>UW `mHfUbg]hcbU``5ffUb[Ya Ybhg`Zcf`7CJ=8!%</u>
- <u>A U YfgdUW</u>
- <u>I BGK 'H]a YHJV'Y</u>
- <u>| BGK <UbXVcc</u>
- <u>9ei ]HUV`Y`@YUfb]b[ 'GYfj ]V\yg</u>

# ⊨a U[Y<sup>·</sup>7fYX]h

GmbYf[]Yg`]b'GcibX'&\$%\*'

### 7 F =7 C G

7F=7CG<sup>.</sup>Dfcj]XYf<sup>.</sup>7cXY<sup>.</sup>\$\$\$-,;

### 5W\_bck `YX[ Ya YbhcZ7ci bhfm

 $\label{eq:linear} \begin{array}{l} K \in \mathcal{W}_{c} (W_{c}) = K \left( \frac{1}{2} - \frac{1$ 

# 5ddYbX]I. '9b[]bYYfg'5ighfU`]U'f195ŁDfcZYgg]cbU`'9b[]bYYf'7cadYhYbWm GHJbXUfX

Dfc[fUa +bhybXYX @YUfb]b[ Cihwca Yq ? bck `YX[ Y 'UbX'q\_]``'VUqY D9%"%7cadfY\Ybq]i Yž'h\YcfmVUqYX'i bXYfqHUbX]b[ 'cZh\Y'i bXYfd]bb]b[ 'bUh fU`'UbX d/mg]WU`:gW]YbWYg`UbX`h\Y`Yb[]bYYf]b[`Z bXUa YbHU`g`Udd`]WUV`Y`hc`h\Y`Yb[]bYYf]b[`X]gW]d`]bY D9%"& 7 cbW/dhiU`i bXYfqHUbX]b[ cZh\Y`a Uh\Ya Uh\Wažbi a Yf]WU`UbU`mg]qžqHUh|qh\WažUbX Weadi hYf'UbX']bZcfaUh]cb'gW]YbWYg'k\]WX'i bXYfd]b'h\Y'Yb[]bYYf]b['X]gW[d`]bY D9%" + + XYdh i bXYfqHbX]b[ cZqdYWU`]qhVcX]YqcZ bck YX[Yk]h bhY'Yb[]bYYf]b[ X]qWd`]bY D9%"('8]qWFfba YbhcZ\_bck YX[YXY]Ycda YbhUbXfYqYUfWXX]fYWfcbg'k ]h.jb'h.Y Yb[]bYYf]b[`X]gWJd`]bY D9%") ? bck `YX[Y`cZYb[]bYYf]b[ `XYg][b`dfUW]WY`UbX`WcbhYl hi U``ZJW/cfg`]a dUWf]b[ `h\Y Yb[]bYYf]b['X]qWjd`]bY D9%"\* I bXYfqHJbX]b[ cZh\Y'qWcdYždf]bW]dYgžbcfa gžUWVci bHJV]]]h]Yg'UbX'Vci bXg'cZ qi qHU]bUV`Y`Yb[]bYYf]b[`dfUWf\WY`]b`H\Y`qdYW[Z]WX]qW[d`]bY 9b[]bYYf]b['Udd`]WUhcb'UV]`]hm D9&"%5dd`]WUhjcb`cZYghUV`]g\YX'Yb[]bYYf]b[`a Yh\cXg`hc`Wca d`YI 'Yb[]bYYf]b[`dfcV`Ya qc`i]b[ D9&"&: `i YbhUdd`]WUhcb'cZYb[]bYYf]b[ 'hYWkb]ei Ygžhcc`g'UbX'fYgci fWfg D9&"' 5dd`]WUhjcb'cZgmghYa UhjWYb[]bYYf]b['gmbh\Yg]g'UbX'XYg][b'dfcWYggYg D9&"( '5dd`]WUHcb'cZgmghYa UHWUddfcUWXYg'hc'h\Y'WcbXi WiUbX'a UbU[Ya YbhcZYb[]bYYf]b[ dfc Y₩q DfcZYgg]cbU`UbX dYfgcbU`Uhf]Vi hYg D9' "%'9h\]WU``WcbXi WiUbX'dfcZygg]cbU``UVWci bHUV]`]hm D9' "&'9ZYWij Y'cfU`'UbX'k filtiYb'Wca a i bjWUijcb'jb'dfcZyggjcbU`'UbX'`UmXca Ujbg D9' "' 7 fYUhi Yžibbci Uhi YUbX dfc!UWi YXYa YUbci f D9' "( 'DfcZygg]cbU``i gY'UbX'a UbU[ Ya YbhcZ]bZcfa Uhcb D9' ") CfXYfma UbU[Ya YbhcZgYZzUbX dfcZygq]cbU`WcbXi Wh D9' "\* 9ZYWAJ Y HYUa 'a Ya VYfg\]d UbX HYUa 'YUXYfg\]d