

MDIA1002

A YX]U/7caaib]WUh]cb7cbhYlhg

HYfa 'C bY''##'&\$&%

7ci fgY 8YHJ] g

7 fYX]hDc]bhg**

Gi a a UfmcZh\Y 7ci fgY

H\]g`Wci fgY`Wcj Yfg`U`fUb[Y`cZdfcZ\gg]cbU``Wca a i b]\Wlficb`dfU\Wf\\Wg`]b`>ci fbU`]ga ž`Di V`]\WFY`\Uf\cbg`UbX 5Xj Yff\g]b['hc`dfcj]XY`mci 'k]h\`U`gc`]X`Zci bXUh\cb`Zcf`Z fh\Yfgh XmUbX`dfcZ\gg]cbU``Yb[U[Ya Ybh'`\Mci k]```XYj Y`cd`U`\Wf]h\\U`\UbX`h\Ycf]nYX`i bXYfghUbX]b['cZh\Y`g]h Uh\X`bUhi fY`cZ\\can a i b]\WlficbždUff\\W`\Uf`m h\Y`]a dU\\can Zcb[c]b[`]bXi ghfm\\Ub[Y`cb`a YX]U`Zcfa g"`\Mci 'k]```VY`Yei]ddYX`hc`XYj Y`cd`dfc!U\\fj Y`UbX \\Y\Uh\jj Y`ghfUh\[]Yg`]b`h\fa g`cZh\I hdfcXi \\g\cb`UbX`UbU`mg]gž`Zc\W gg]b['cb`dfcZ\gg]cbU``k f]h\\b`[Ybf\g`UbX\\ck`h\YmUfY`UXUdh\X`hc`gi]hX]Z\f\bhaif\bhaifcg\g`UbX'd`Uh\Zcfa g"`

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

- %"]XYbh]Zmh\Y`]a dUWicZghfi Wi fU``W\Ub[Yg`]b`Wca a i b]WUh]cb`]bXi ghf]Yg`cb`Wca a i b]WUh]j Y`dfUWi]WYg UbX`Zcfa q
- &" dfcXi WYz`UXUdh`UbX`di V`]g\`Wca a i b]WUhjj Y`hYI hg`Uddfcdf]UhY`hc`HUf[YhYX`WcbhYI hg`UbX`d`UhZcfa g ' " [XYbh]Zm`UbX`Udd`m`VUq]Wdf]bWJd`Yq`cZdfcZYqq]cbU``Wca a i b]WUhjj Y`qhUbXUfXq

HYUWX]b[GlfUhY[]Yg

H\]g`Wci fgY`Wcj Yfg`U`fUb[Y`cZdfcZYgg]cbU``Wca a i b]\Wlficb`dfU\Wf\\g']b`>ci fbU`]ga ž`Di V`]\WFY`Uflcbg`UbX 5Xj Yffig]b['fc`dfcj]XY`ghi XYbhg`k]h\`U`gc`]X`Zci bXUflcb`Zcf`Z ff\\Yf`ghi XmUbX`dfcZYgg]cbU``Yb[U[Ya Ybh' H\Y`Wci fgY`dfcj]XYg`U`h\YcfYf\\W\`ZfUa Yk cf_`Zcf`i bXYfgHUbX]b['W ffYbh\WcbhYl hg`cZ\W.Ub[Y`]b`fY`Uflcb`fc bYk g`Wf\WfgžUhh\bf\cb`UbX`Vi g]bYgg`a cXY`gž'UbX`h\Y`]a dU\WicZU```h\YgY`cb`f\\Y`a YX]U`Zcfa g`f\\UhUfY dfcXi \WX"`Ghi XYbhg`k]```VY`Yei]ddYX`fc`VY`dfc!U\Wf\j Y`UbX`\WfYUf\j Y`]b`f\fa g`cZhYl hdfcXi \Wf\cb`UbX UbU`ng]g"

5ggYgga Ybh

 $5\,ggYgga\ YbhYI\ hYbg]cbg``UfY`CB@M[]j\ Yb'j\]U`GdYM]U``7\,cbg]XYfUh]cb'h\Uh]g'gi\ Va\]hhYX'j\]U'a\ mi\ bgk\ 'hc'h\YWb'j\ Ybcf''`Mci\ f'h' hcf'WUbbch[]j\ Y'YI\ hYbg]cbg''$

⊋mci 'UfY'fY[]ghYfYX'k]h\`I BGK 'X]gUV]`]hmgYfj]WYgž'd`YUgY``Yhmci f'hi hcf'UbX'h\Y'7cbj Ybcf'f@ci]gYFUjY``]^"fUjY``]4 i bgk "YXi "Ui Ł'_bck"

.

5ggYgga Ybh'HUg_g

5ggYgga Ybh'tUg_	K Y][\h	8iY'8UhY	Gh XYbh@YUfb]b[CihWca Ygʻ5ggYggYX
DfcZYgg]cbU`Kf]hjb[HUg_'%	&) ı	%(#\$' #&\$&\$`\$) .\$\$`DA	&ž¨
DfcZYgg]cbU`Kf]hjb['HUg_&'	')	\$*#\$(#&\$&%`\$).\$\$`DA	&ž¨'
DfcZYgg]cbU`Kf]hjb['HUg_'	(\$1	&- #\$(#&\$&%`\$) .\$\$`DA	%ž`&ž`'

5ggYgga Ybh'8YhJ]`g

5ggYgga Ybh% DfcZYgg]cbU`K f]hjb['HUg_'%

8YHJ]`g.

+) \$ k cfXg"

: YYXVUW_'j]U'@A G

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

 $\label{eq:continuous} D`YUgY`gYY`th`Y`A~ccX`Y`Wci~fgY`g]th'~\cite{C}'Z~```XYtU]`g`cZth`]g`UggYgga~Ybt''$

 $\label{thm:condition} \mbox{Hi fb]h]b"gYh]b" (. `H\]g"Ugg][ba Ybh]g"gi Va]hhYX"h\fci [\ 'Hi fb]h]b"UbX"gh XYbhg"Xc"bchgYY"Hi fb]h]b g]a]`Uf]hmfYdcfhg"$

5ggYgga Ybh& DfcZYgg]cbU K f]h]b[HUg_&

8YHJ]`g.

+) \$ k cfXg"

: YYXVUW_"j]U"@A G""

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

 $\label{eq:continuous} D`YUgY`gYY`h\Y`A~ccX`Y`Wci~fgY`g]hY`Zcf`Z\```XYhU]`g`cZh\]g`UggYgga~Ybh'$

 $\label{thm:condition} \mbox{Hi fb]h]b"gYhh]b" . "H\] g"Ugg][ba Ybh"]g"gi Va]hhYX"h\fci [\\'Hi fb]h]b"UbX"ghi XYbhg"Xc"bch"gYY"Hi fb]h]b g]a]`Uf]hmfYdcfhg" \mbox{$$(χ)$ a]hhYX"h\fci [\\'Hi fb]h]b"UbX"ghi XYbhg"Xc"bch"gYY"Hi fb]h]b g]a]`Uf]hmfYdcfhg" \mbox{$$(χ)$ a]hhYX"h\fci [\\'Hi fb]h]b"UbX"ghi XYbhg"Xc"bch"gYY"Hi fb]h]b g]a]\mbox{$$(χ)$ a]hhYX"h\fci [\\'Hi fb]h]b"UbX"ghi XYbhg"Xc"bch"gYY"Hi fb]h]b g]a]\mbox{$$(χ)$ a]hhYX"h\fci [\\'Hi fb]h]b"UbX"ghi XYbhg"Xc"bch"gYY"Hi fb]h]b g]a]\mbox{$$(χ)$ a]hhYX"h\fci [\\'Hi fb]h]b"UbX"ghi XYbhg"Xc"bch"g"Xc"bch"gYY"Hi fb]h]b g]a]\mbox{$$(χ)$ a]hhYX"h\fci [\\'Hi fb]h]b"UbX"ghi XYbhg"Xc"bch"g"X$

5ggYgga Ybh' . 'DfcZYgg]cbU` K f]h]b['HUg_''

8YHJ]`g.

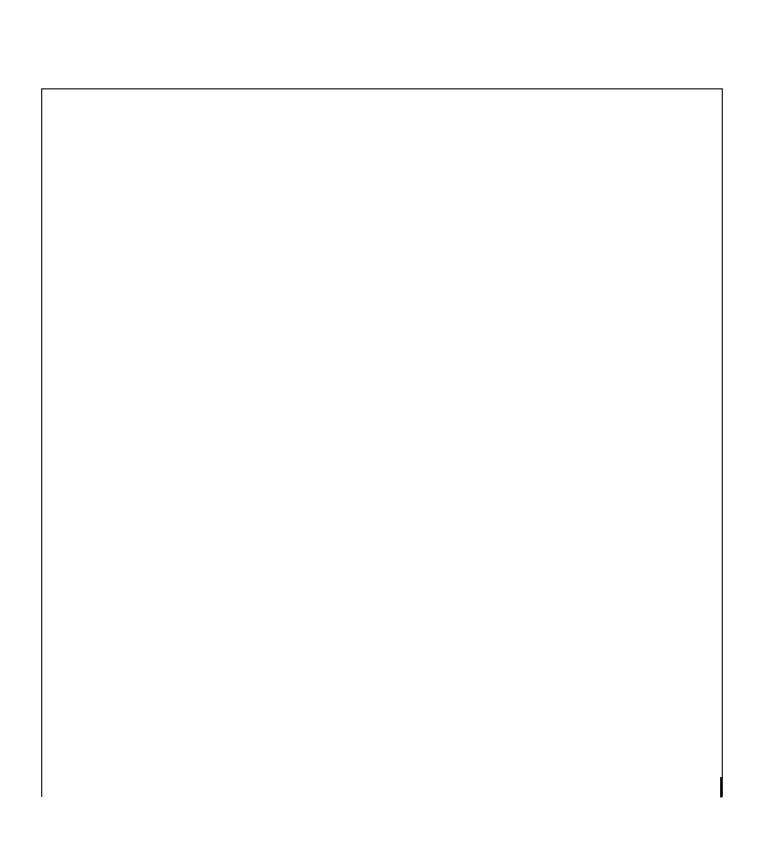
%) \$\$ k cfXg cf Yei]j U Ybh'

Gh XYbhg dfcXi W U bYk g cf DF a YX]U dUW_U[Y

: YYXVUW_'j]U'@A G

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

 $\label{eq:def-def-def} D`YUgY`gYY`th\Y`A~ccX`Y`Wci~fgY`g]th'`Zcf`Z~```XYtU]`g`cZth\]g`UggYgga~Ybt'$



FYgci fWfg

DfYgWf]VYX F Ygci fWYg

Mci 'Wub'di fWk UgY'th,]g'Zfca 'th, Y'I BGK 'Vcc_g\cd']b'Y]th, Yf'df]bhicf'X][]tU''Zcfa /th, Y'Wkc]Wf']g'i d'tc'mci "A U_Y'gi fY'mci 'Xc'di fWk UgY'th, Y'&bX'YX]t]cbz'Ug'th, YfY'UfY'g][b]Z[WubhiX]ZZYfYbWfg'k]th, th, Y'Z[fghYX]t]cb" GYWcbX'\UbX'Wcd]Yg'a UmVY'Uj U]'UV'Y"'H\Y'`]VfUfmik]``\Uj Y'U'X][]tU'`WcdmUj U]'UV'Y'Vi hth, YfY']g'U'ghf]Wh ']a]hcb'\ck 'a i Wk'mci 'Wub'Xck b'cUX'Zfca ']t"

Gi Va]gg]cb cZ5ggYgga YbhHUg_g Hi fb]h]b Gi Va]gg]cb

⊋mci 'YbWci bhYf'U'dfcV`Ya 'k \Yb'UhhYa dh]b['hc'gi Va]h'mci f'Ugg][ba Ybh'h\fci [\'Hi fb]h]bž'd`YUgY

5 WUXYa]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"`±hWJb`hU_Y`a Ubm Zcfa gžZfca `XY`]VYfUhY`W\YUh]b['hc`UWW]XYbhJ``mWcdm]b['Zfca `U`gci fWY`k]h\ci hUW_bck `YX[Ya Ybh'

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

 $7 \text{ cdm}b[...i g]b[...h\Y.gUa Y.cf.j Yfmig]a] \Uf'k cfXg'hc'h\Y.cf][]bU''hYl h'cf']XYU'k]h\ci h'U\V_bck `YX[]b[...h\Y.cf][]bU''hYl h'cf']XYU'k]h'cf']$

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]`]h]Yg'Ug'U'gh XYbhUhI BGK
 VY'Uk UfY'cZd`U[]Uf]ga ž'Wcdmf][\hz'I BGK 'Gh XYbh7cXY'cZ7cbXi WhUbX'5VWWdhUV`Y'I gY'cZ IBGK =7 HF Ygci fWrg Dc`]Wh

5 WUXYa]W + DZcfa Uhjcb

: cf`YggYbhJU``gh XYbh`]bZcfa UhJcb`fY`UhJb['hc.

- fYei Yghg Zcf Yl hYbg]cb/
- `UhY 'gi Va]gg]cbg'[i]XY`]bYg/
- fYj]Yk cZa Uf_g/

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