

MDIA5005

7ci fgY 8YHJ] g

7 fYX]hDc]bhg**

Gi a a UfmcZh\Y 7ci fgY

H\]g`Wci fgY`]bhfcXi WYg`ghi XYbhg`hc`h\Y`W`hi fU`ž'dc`]h]WU``UbX`YVcbca]Wfc`Y`d`UmYX`Vmgdcfhi[`cVU``m''=h U]a g`hc`XYj Y`cd'h\Y]f`i bXYfghUbX]b[`cZh\Y`fc`Y`d`UmYX`Vmh\Y`a YX]U`]b`Wca a YfW]U`]g]b[`gdcfhiUbX`]b [`cVU`]g]b[`Ui X]YbWYg`Zcf`gdcfh''=hk]```U`gc`XYj Y`cd'ghi XYbhgfii bXYfghUbX]b[`cZgdcfhg`a YX]U`UbX'di V`]W fY`Uh]cbg`dfUWf]WY"

Hcd]\Wg`]bWi XY. 'h\Y`W `h fU`z`dc`]h]\WJ``UbX`Y\\cbca]\Wfc`Yg`cZgdcfh\f(`cVU`)gYX`gdcfhg`UbX`gdcfhg Ui X]\Yb\Wrg\gdcfhg`ZJ\bg\bYk 'a YX]\U`]a d\U\\\g'cb`gdcfhg`fYdcfh]\b[`'UbX`di V`]\WfY`\Uh]cbg\f\gdcfhg`UbX\gdcfhg`UbX\gdcfhg`UbX\gdcfhg`UbX\di V`]\\WfY`\Uh]cbg\gdcfhg`Vf\UbX]\b[\z`dfca ch]cb`UbX`a Uf_Yh]\b[\text{V}\bY\gY\Uf\\chi\bY\f]\bhYfj]\Yk\hY\\k\b]ei Yq`Zcf`qdcfhg`k f]\h]\b["

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

%" 8 Ya cbglfUhY 'U'Wf]hJWU``i bXYfghUbX]b['cZgdcfha YX]U'UbX'dfca chjcb" &" 8 Ya cbglfUhY 'U'Wf]hJWU``i bXYfghUbX]b['cZgdcfhWca a i b]WUhjcb'[YbfYg" ' " 8 Ya cbglfUhY dfUWhWD``g_]``g']b'a i `hjdYY'[YbfYg'cZWca a i b]WUhjcb

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5ggYgga Ybh

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6ch\ UggYgga Ybhg A I GH VY gi Va]hhY Xž cf mci k]``Ui hca Uh]\WJ``mZJ]`h\ Y \Wci fgY"

@UhY`dYbU`hm') i `dYf`XUmf]bWi X]b[`k YY_YbXgŁ"

Zmci 'k ci `X``]_Y'hc`X]gW gg'h\Y'UggYgga Ybhg'ci hg]XY'cZhi hcf]U`gž'd`YUgY'UhhYbX'h\Y'Wcbgi `hUh]cbh]a Y. 'A cbXUmgž'A]XXUm! '& \$\$da '"'D`YUgY'Ya U]`'VYZcfY\UbX'hc`a U_Y'Ub'Uddc]bha Ybh'

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F YgYUfWX '9ggUm') \$1	&' #\$(#&\$&%`\$(`.\$\$`DA	%ž &

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8 YW] g.

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 $\label{thm:limit} \begin{tabular}{ll} Hi fb]h]b "UbX"gh XYbhg"Xc "bchgYY"Hi fb]h XYbhg"Xc "bchgYY"Hi fb]h]b "UbX"gh XYbhg"Xc "bchgYY"Hi fb]h XYbhg XYbhg XYbhg"Xc "bchgYY"Hi fb]h XYbhg XYbhg XYbhg XYbhg"Xc "bchgYY"Hi fb]h XYbhg XYbhg$

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8 YW] g.

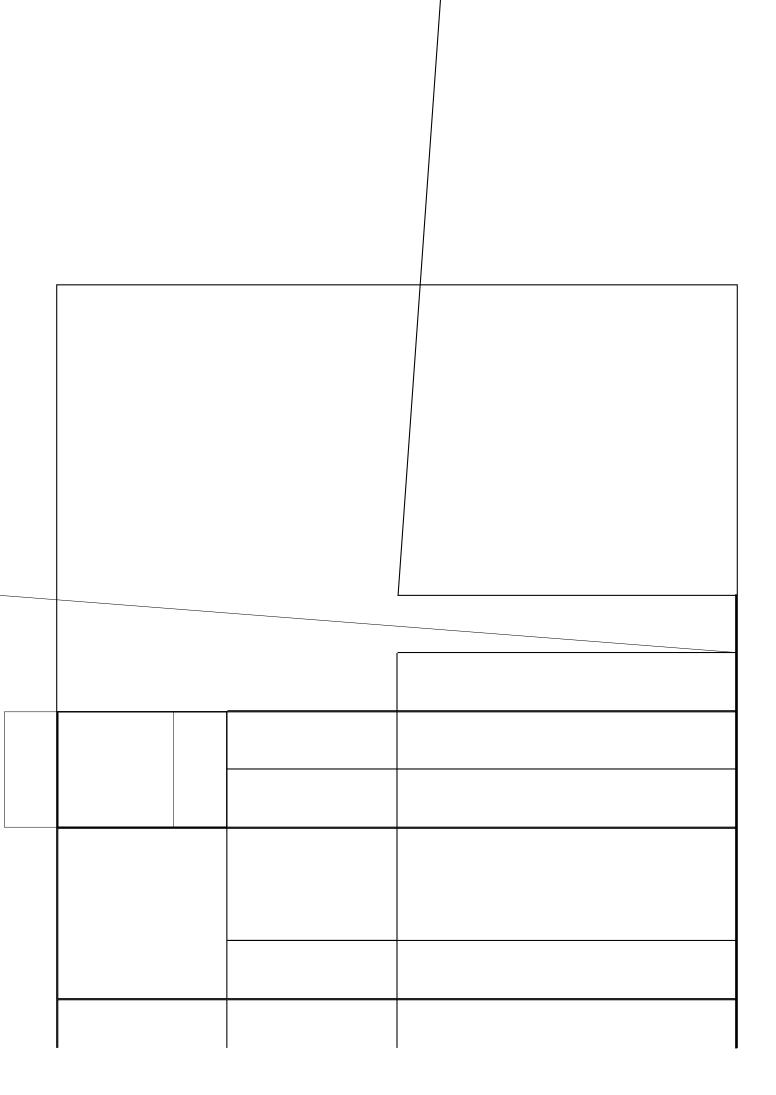
&\$\$\$ k cfXg"

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

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 $\label{thm:condition} \mbox{Hi fb]h]b"gYh]b" Label Label$



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DYXYfgYbž'A "D"'f9XŁ"'f&\$% Ł'Dagf'WYW: S`VTaa] aXE badf 5 a__ g` [USf[a` "'@cbXcb. 'F ci hYX[Y'

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 $5bXfYk gžD"'f\&\$\$) £Ebadfe \agd $S'[e_, SbdSUf[US^[\ fdaVgUf[a` `@cbXcb#H\ci gUbX'C U_g#BYk `8Y`\]. `GU[YDi V`]WUf]cbg$

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

H\]g`Wci fgY`k]```VY`Yj U`i UhYX`j]U`h\Y`A m9I dYf]YbWY`gi fj Ymž'UbX`h\fci [\`]bZcfa U``ZYYXVUW_`]b`WUgg"`5g`U fYgi `hcZZYYXVUW_`]b`dfYj]ci g`mYUfgž'k Y`\Uj Y`UXUdhYX`h\Y`Wci fgY`hc`]bWi XY`a cfY`ZUWY!hc!ZUWY`WcbhUWh UbX`[fci d`X]gWi gg]cb`UWfj]h]Yg"

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

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.

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

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- VY`Uk UfY`cZd`U[]Uf]ga ž`Wcdmf][\hz'l BGK `Gh XYbh7cXY`cZ7cbXi WhUbX`5VWWdhUV`Y`l gY`cZ I BGK `=\forall H`F Ygci f\W\g`Dc`]\m\m
- VY 'Uk UfY 'cZh\Y 'ghUbXUfXg 'cZVY\Uj]ci f'Yl dYWYX 'cZYj YfmcbY ']b 'h\Y 'l BGK 'Wca a i b]hm
- `cWUHY 'gYfj]WYg'UbX ']bZcfa UH]cb'UVci hI BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh\YgY'UfYUg'k]``VY'ZJa]`]Uf'hc'mci ž'ch\Yfg'k]``VY'bYk"'; U]b]b['U'gc`]X'i bXYfgHJbX]b['cZU``h\YfY`UhYX'UgdYWng'cZ9@+69'k]``\Y`d'mci 'a U_Y'h\Y'a cghicZmci f'ghi X]Yg'UhI BGK "'\\hd.##qi VYWfi |XYg"`]VfUfm'i bqk "YXi "Ui #\`]qY#JVci hY`]qY