

EDST5458

F YgYUfVX]b['GdYWjU'`9Xi Wjh]cb

GYa YghYf'Hk c`##`&\$%

GWXcc`cZ9Xi Wjh]cb`##`I BGK ``5ftg`UbX`GcWjU`GvYbWw'g

7ci fgY`Cj Yfj]Yk

`GHZZ7cbhJW`i8YhJ]`g`

7ci fgY'8YHJ]`g

7fYX]hDc]bHg`*`

K cf_`cUX

%) \$`ci fg]bWi X]b[`WUgg`Wc bHUWh\ci fgžfYUX]b[gž`WUgg`dFy dUfUh]cbžUggYgga YbžZc``ck`i d`UWWhj]hYgž YhW

Gi a a UfmicZ`h\Y`7ci fgY

H\]g`Wci fgY`]g`XYg][bYX`hc`gi ddcfhmci`hc`YI d`cfY`UbX`W]h]ei Y`mci f`Wc gYb`UfYU`cZfYgYUfW`Vm`cWWh]b[`]h]b`h\Y`Wc bH\I hcZ`Ym]ggi Yg`UbX`UddfcUWXYg`]b`gdYW]U`YXi WWh]cb`UbX`j]Yk]b[`]hZca`U`X]j Yfg]hmicZ ei Ubh]hU]j Y`UbX`ei U`]hU]j Y`dYfgdYW]j Yg`H\Y`Wci fgY`dfcj]XYg`Ub`]bfcXi WWh]cb`hc`h\Y`]a dUWhcZX]ZYfYbh Yd]ghYa`c`c[]W]`UbX`a YhcXc`c[]W]`UddfcUWXYg`]b`ei Ubh]hU]j Y`UbX`ei U`]hU]j Y`gdYW]U`YXi WWh]cbU`

i bXYfgHUbX]b['UbX'UbU'm]WU'g_]`'jg'U'_YmIA 9X'dfc[fUa a Y'ci hWta Y"

6i hH]g'Wci fgY'dcg]hcbg'hYUWX'Yfg'Ug'bdaVgUWde'Ug'k Y''Ug'Ua' eg_ Wde'cZYXi WU]cbU''fYgYUfWk'zUbX
VYmc'bX'Yb[U[]b['k]h'YI]gh]b['fYgYUfWk'zdUfh]W]dUbhg'k]''YUfb'hY'fY'Yj Ubhg_]`g'hc'WcbXi W]U'ga U''
fYgYUfWk'dfc'YWh'fY'Yj Ubh'hc'hY]f'ck b'hYUWX]b['WcbhYI hfg]e'H\Y'XYj Y'cda Ybh'cZdfcW]Xi fU'Ug'k Y''Ug
XYWUfU]h] Y'_bck'YX[Y]g'hYfY'Zc'fY'hY'Wc'fY'ci hWta Y'cZ'hY'Wci fgY'zUbX]g'df]cf]h]nYX'h'fci [\ci h'

HYUWX]b['cb'hY'Wci fgY]g'Xf]j Yb'VmU'W]h]WU'Yb[U[Ya Ybhk]h'fYUX]b[g'UbX'hY'Wc'fY'hYI h'cc_"
C b`]bY'X]gW'gg]cbg'z'W]b'hYX'Ufci bX'hY'_Ym'fYUX]b[g'z'U'ck'Zc'f'hY'c'fm'UbX'UbU'm]g]g'hc'VY'XYj Y'cdYX'Vi h
U'gc'Udd']YX'z'k]h'hY'U]a'cZdfcXi W]b['UW]j Y'z'Yb[U[YX'gh XYbh'fYgYUfWk'Yfg'k \c'k]''gi VgYei YbhmiVY
k Y''Yei]ddYX'hc'Udd'm'hY'_bck'YX[Y'UbX'g_]`g'XYj Y'cdYX']b'hY]f'ck b'hYUWX]b[#YgYUfWk'WcbhYI h]g"

5i ghfU`]Ub`DfcZYgg]cbU` ; fUXi UhY`HYUWx]b[`GHUbXUfXg

GHUbXUfX	8YgW]dh]cb
' "&"%	D`Ub`Yggcb`gYei YbW`g`i`g]b[` _bck`YX[Y`c`Zgh`XYbh`YUfb]b[z`W`b`h`b`h`UbX`Y`Z`Y`W`j`Y`h`U`W`x]b[`ghfU`h`[]Yg"
' "&"&	D`Ub`UbX`]a`d`Ya`Ybhk`Y`!`ghfi`W`i`fYX`Y`U`fb]b[`UbX`h`U`W`x]b[`dfc[fUa`g`c`f`Yggcb`gYei`YbW`g`h`U`h`Y`b[U[Y`gh`XYbh`g`UbX`dfca`c`h`Y`Y`U`fb]b["
(") "("	F`Y`j`Y`k`c`f]a`d`Ya`Ybh`b`Y`k`d`c`]W`Y`g`UbX`ghfU`h`[]Yg`h`c`Y`b`g`i`f`Y`h`Y`g`U`Z`Z`f`Y`g`d`c`b`g]V`Y`UbX`Y`h`]W`i`g`Y`c`Z`=7`H`]b`Y`U`fb]b[`UbX`h`U`W`x]b["
) "&"	G`Y`Y`W`h`Z`f`c`a`Ub`Y`Z`Y`W`j`Y`f`U`b[Y`c`Z`ghfU`h`[]Yg`h`c`dfcj`X`Y`h`U`f[Y`h`X`Z`Y`X`V`U`W`V`U`g`Y`X`c`b`]b`Z`f`a`Y`X`UbX`h`a`Y`m`↑`X[Ya`Y`bh`g`c`Z`Y`U`W`x`gh`XYbh`g`W`f`Y`b`h`b`Y`Y`X`g`]b`c`f`X`Y`f`h`c`dfc[fYgg`Y`U`fb]b[
* "&"	D`Ub`Z`c`f`dfc`ZYgg]cbU`Y`U`fb]b[`VmU`W`W`gg]b[`UbX`W`]h`e`i`]b[`f`Y`Y`j`Ubh`f`Y`g`Y`U`f`W`x`z`Y`b[U[Y`]b

5ggYgga Ybh

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	Gh XYbh@YUfb]b[Ci Hwca Yg 5ggYggYX	5 #HG@DfcZYgg]cbU'; fUXi UHY HYUW]b['GHUbXUFXg'5ggYggYX	8i Y 8UHY
7 f]h]WU' F YZYW]cb cZDi V]g\YX F YgYUfW) \$i	%z&Z	' "&%z(") "(z* "&"	\$* #\$, #& \$% \$&. %* DA
F YgYUfW DfcdcgU) \$i	' z(' "&(&z) "&"	&%# \$- #& \$% \$&. %+ DA

D`YUgY`fYZf`hc`3gefD`[S` BdaXwee[a` S`^E`fS` VSdVe XadFWSUZWb`cb`hY`dfYj`]ci`g`dU[`Y`

5ggYgga Ybh8YHU]`g

5ggYgga Ybh%`7 f]h]WU' F YZYW]cb`cZDi V]g\YX`F YgYUfW

GHUfhXUHY.`

8YHU]`g.`HUg_`%!`7 f]h]WU' F YZYW]cb`cZDi V]g\YX`fYgYUfW`!'`z\$\$\$`k`cfXgGh`XYbh`g`k`]'`fYW`j`Y`k`f]h]b`ZYXVUW`_`k`]h]b`h`k`c`k`YY_g`cZgi`Va`]gg]cb"

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

Gi a a Ufm

H\]g`hUg_`fYeI`]fYg`mci`hc`gY`YW`h`k`c`cZ`h`Y`di`V]g\YX`cf][`]bU`fYgYUfW`dUdYfg`Zca`h`Y`gYgg]cb!`Vmi`gYgg]cb`fYUX]b[`]]gh`-`mci`a`i`gh`B`C`H`i`gY`h`Y`h`Y`i`h`v`cc_`Z`f`h`g`Ugg][`ba`Y`b`h`z`U`b`X`mci`a`i`gh`g`Y`Y`W`h`Z`ca`h`Y`dUdYfg`g`h]f`f`Y`X`U`g`f`Y`g`Y`U`f`W`dUdYfg`f`U`g`c`d`d`c`g`Y`X`h`c`a`Y`h`c`X`c`c`[`midUdYfg`z`k` \`W`X`c`b`c`h`d`f`Y`g`Y`b`h`c`f`][`]bU`fYgYUfW`h`E`5`b`g`k`Y`f`h`Y`Z`c`k`]b[`ei`Y`g`h`c`b`g`W`h]WU`m

%`4`d`W`k`eg_`_`S`d`e`W`h`Y`h`k`c`h`Y`h`g`]b`h`f`a`g`c`Z`h`Y`f`h`c`d]W`g`L`U`b`X`k` \`Y`f`h`Y`m`Z`h`]b`h`c`h`Y`U`b`X`g`W`d`Y`c`Z`g`d`Y`W]U`Y`X`i`W`h]c`b`f`Y`g`Y`U`f`W`f`Y`["`" `h`]g`]g`U`d`U`d`Y`f`]b`h`Y`U`f`Y`U`c`Z`U`i`h`g`a`h`U`h`Z`i`b`X`...`E`M`c`i`W`U`b`i`g`Y`U`b`m`i`c`Z`h`Y`f`Y`g`Y`U`f`W`d`U`d`Y`f`g`]b`W`i`X`Y`X`]b`h`Y`W`c`i`f`g`Y`f`Y`U`X]b[`g`Z`f`h`]g`hUg_`-`b`c`h`U`U`f`Y`Y`X`i`W`h]c`b!`g`d`Y`W]Z`W

&`4`d`W`k`V`W`e`U`d`T`W`f`Z`W`d`W`e`W`S`d`J`Z`_`W`Z`a`V`i`g`Y`X`]b`Y`U`W`d`U`d`Y`f`U`b`X`Y`U`W`d`U`d`Y`f`g`_`S`[`X`V`[`Y`#`f`Y`["`" `h`]g`]g`U`ei`U`]h]h]Y`d`U`d`Y`f`h`U`h`i`g`Y`X`g`h`X`Y`b`h`Z`W`g`[`f`c`i`d`g`U`b`X`]b`h`Y`f`d`f`Y`h]Y`X`U`U`U`b`U`m`g`]g`h`c`g`l`c`k`h`U`h`..`E`/

'`":`c`f`Y`U`W`d`U`d`Y`f`z`U`d`f`c`g`W`f`Z`W`d`W`e`W`S`d`J`Z`_`W`Z`a`V`g`e`W`S`e`[`f`d`W`S`f`W`e`f`a`f`Z`W`f`a`b`[U`-`k` \`U`h`U`f`Y`h`Y`g`h`f`Y`b[`h`g`U`b`X`k`Y`U`_`b`Y`g`g`Y`g`c`Z`i`g`]b[`h`]g`a`Y`h`c`X`Z`f`h`]g`f`Y`g`Y`U`f`W`d`f`c`V`Y`a`z`k` \`U`h`c`h`Y`f`k`U`m`g`a`][`h`h`U`j`Y`V`Y`Y`b`V`Y`h`f`z`U`b`X`l`c`k`a`][`h`k`g` \`U`j`Y`U`d`d`f`c`U`W`Y`X`h`Y`f`Y`g`Y`U`f`W`d`f`c`V`Y`a`3

(`7`ca`a`Y`b`h`V`f]Y`Z`m`c`b`h`Y`i`d`f`[`Y`S`V`^`S`k`a`g`f`a`X`f`Z`W`b`S`b`W`d`h`c`k` \`U`h`Y`i`h`Y`b`h`X`]X`mci`Z`b`X`]h`Y`U`g`m`c`f`X`]Z`W`h`f`U`b`X`#`f`]b`h`f`Y`g`h]b[`c`f`b`c`h]b`h`f`Y`g`h]b[`E`h`c`f`Y`U`X`3`<`c`k`a`][`h`h`h`Y`k`f]h`f` \`U`j`Y`]a`d`f`c`j`Y`X`]b`B

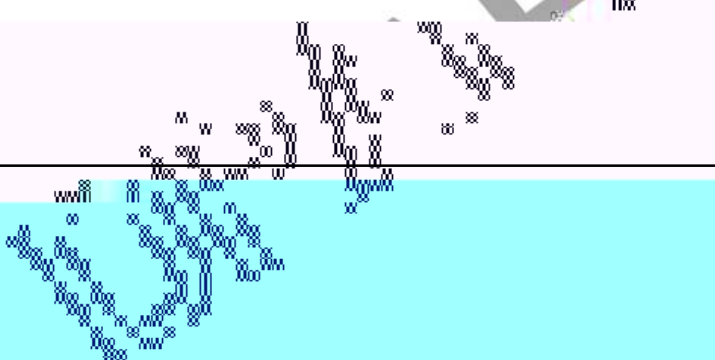
Hi fb]hb'gYhb[. 'H\]g'Ugg][ba Ybh]g'gi Va]h'X'h'fci [\ 'Hi fb]hb'UbX'ghi XYbhg'WUb'gYY'Hi fb]hb'g)a]'Uf]hm
fYdcfng"

5ggYgga Ybh&. 'F YgYUfW' DfcdcgU`

I BGK 'G7 < CC @ 'C: '98I 75H€B 'FI 6F ⇨ # 998657? 'G < 99H'

98GH) () ,

5ggYgga YbhHUg_ '7 f]h]W' F YZYW]cb'cZDi V`]g\YX'F YgYUfWx

GdYW]Z]W7 f]h]f]U	f]f]t ————— 2f]t				
<p>I bXYfghUbX'cZhY'ei Ygh]cb'cf']ggi Y'UbX'hY'_YmWcbW'dhg]bj c'j YX</p> <ul style="list-style-type: none">• i bXYfghUbX]b['cZhY'hUg_'UbX']rg'fY'Uh]cbg\]d'hc'fY'Yj UbhUfYUg cZhYcfnz'fYgYUfWx 'UbX'dfUW]W' gi a a Uf]Yg'cZHYI hg <p>fYdfYgYbhU]cbg'cZk f]h]fg' Uf[i a Ybhg'UbX'a YhcXg</p>					
					

GdYWZjW7 f]hYf]U

flŁ—————2fZŁ

@YWi fYf

F YWŁa a YbXYX. ' #&\$'fl @DG'7F'8B'<8Ł

k Y][\h]b[' :&\$ł

'B6. 'h]g'h]W_g]b'hY'j Uf]ci g'Vcl Yg'UbX'XYg][bYX'hc'dfcj]XY'ZYXVUW'hc'ghi XYbHg/hYmUFY'bc'h[]j Yb
Yei U'k Y][\h]b'XYh'fa]b]b['hY'fYWŁa a YbXYX' [fUXY"8YdYbX]b['cb'hY'bUłi fY'cZ'hY'UggYgga YbhiUg_ž

GdYWZjW7 f]hYf]U

fl ————— 2fZł

@YWi fYf

F YWca a YbXYX. ' #&\$'fl @DG'7F'8B'<8Ł

k Y][\h]b[: '&\$i

'B6. h]g'h]Wg]b'hY'j Uf]ci g'Vcl Yg'UbX'XYg][bYX'hc'dfcj]XY'ZYXVUW'hc'ghi XYbhg/hYmiUFY' bch[]j' Yb
Yei U'k Y][\h]b'Xm]f]a]b]b]h'Y'W] a YbXYXb[fUXY"8YdYbX]b['cb'hY'bUhi fY'cZ'h'Y'UggYgga YbhfUg_ž b]b['h
'YWi fYfg'a UmU'gc'Wcbh'I h U']nY'UbX#cf'Ua YbX'hYgY'gdYWZjW7]hYf]U" 'H\Y'fYWca a YbXYX' [fUXY]g
hYbHh]j Y'cb'mžgi Va 'YWi'hc'ghUbXUfX]gUh]cb'dfcWggYg'UbX'Uddfcj U'Vmi'hY'GW'cc'cZ9Xi WUh]cb

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gh XYbhtg`UFY`YI dYWVX`hc`di h`h`Y]f`bUa Yg`UbX`gh XYbhibi a VYfg`cb`Yj YfmdU[Y`cZ`h`Y]f`Ugg][ba Ybhtg`

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

≠mci`YbWci bHYf`U`dfcV`Ya`k` \Yb`U`h`Ya` d]b[`hc`gi Va]hmc`i`f`Ugg][ba Ybht`h`fci [\`Hi`fb]h]b`z`d`Y`UgY`
HY`Yd`cbY`9I`HYfbU`Gi`ddcfhcb`-` ,) " ' ' %cf`Ya`U]`h`Ya` `cb`[YI`HYfbU`HY`hgi`ddcfh4`i`bgk`"YXi`"Ui`"](#)Gi`ddcfh`
`ci`fg`UFY` , .\$\$Ua` -`%\$.\$\$da` `cb`k`YY`XUmg`UbX`-` .\$\$Ua` -`) .\$\$da` `cb`k`YY`YbXg`f1`*)`XUmg`U`n`Y`UfL`≠mci`
UFY`i`bUV`Y`hc`gi Va]hmc`i`f`Ugg][ba YbhXi`Y`hc`U`Zi`h`k`]h`Hi`fb]h]b`mci` `a`UmUdd`m`Zc`f`Ub`YI`HYbg]cb`Z`Vi`hmc`i`
a`i`ghf`Y`h]b`mci`f`h]W`Y`hbi`a`VYf`Z`ca` `9I`HYfbU`Gi`ddcfh`f`U`cb[`k`]h`U`b`m`c`h`Y`f`f`Y`Y]`UbhXcW`a`Ybhtg`hc`
]bWi`XY`Ug`Yj`]XYbW`hc`gi`ddcfh`mci`f`YI`HYbg]cb`Udd`]W]h]cb`≠mci` `Ya`U]`9I`HYfbU`Gi`ddcfh`mci` `k`]`
Ui`hca`U]h]W]`m`f`Y`W]j`Y`U`h]W`Y`hbi`a`VYf`Z`Vi`h]Z`mci` `HY`Yd`cbY`mci` `k`]`b`Y`Y`X`hc`gd`Y`W]Z]W]`m`Ug`_`Zc`f`cbY`"
Hi`fb]h]b`U`gc`dfcj`]XYg`i`dXU`h`g`cb`h`Y]f`gm`g`h`Ya` `gh`U`h`g`cb`Hk`]h`Y`f`"

;`YbYfU`m`z`UggYgga`YbhHUg_g`a`i`ghVY`gi`Va`]h`Y`X`Y`Y`W`f`cb]W]`m`j`]U`Y]h`Y`f`Hi`fb]h]b`cf`U`A`cc`X`Y`
Ugg][ba Ybh` `b`]bg`h`U`b`W`g`k` \Yf`Y`h`lg`]g`b`ch`id`cgg]V`Y`Z`]h`k`]`VY`g`h`U`h`X`cb`mci`f`Wci`fg`Y`g`A`cc`X`Y`g]h`k`]h`
U`h`Y`fb`U`h]`Y`gi`Va`]gg]cb`XY`h]g`"

@UH`5ggYgga YbhDYbU`h]Yg

Gh XYbhtg`UFY`fYgdcbg]V`Y`Zc`f`h`Y`gi Va]gg]cb`cZUggYgga YbhHUg_g`Vmi`h`Y`f`Ye`i`]f`Y`X`XU`h`g`UbX`h`a`Yg`
8YdYbX]b[`cZ`h`Y`YI`HYbhc`ZXY`Um]b`h`Y`gi Va]gg]cb`cZUb`UggYgga YbhHUg_g`dUgh`h`Y`Xi`Y`XU`h`UbX`h`a`Yz`

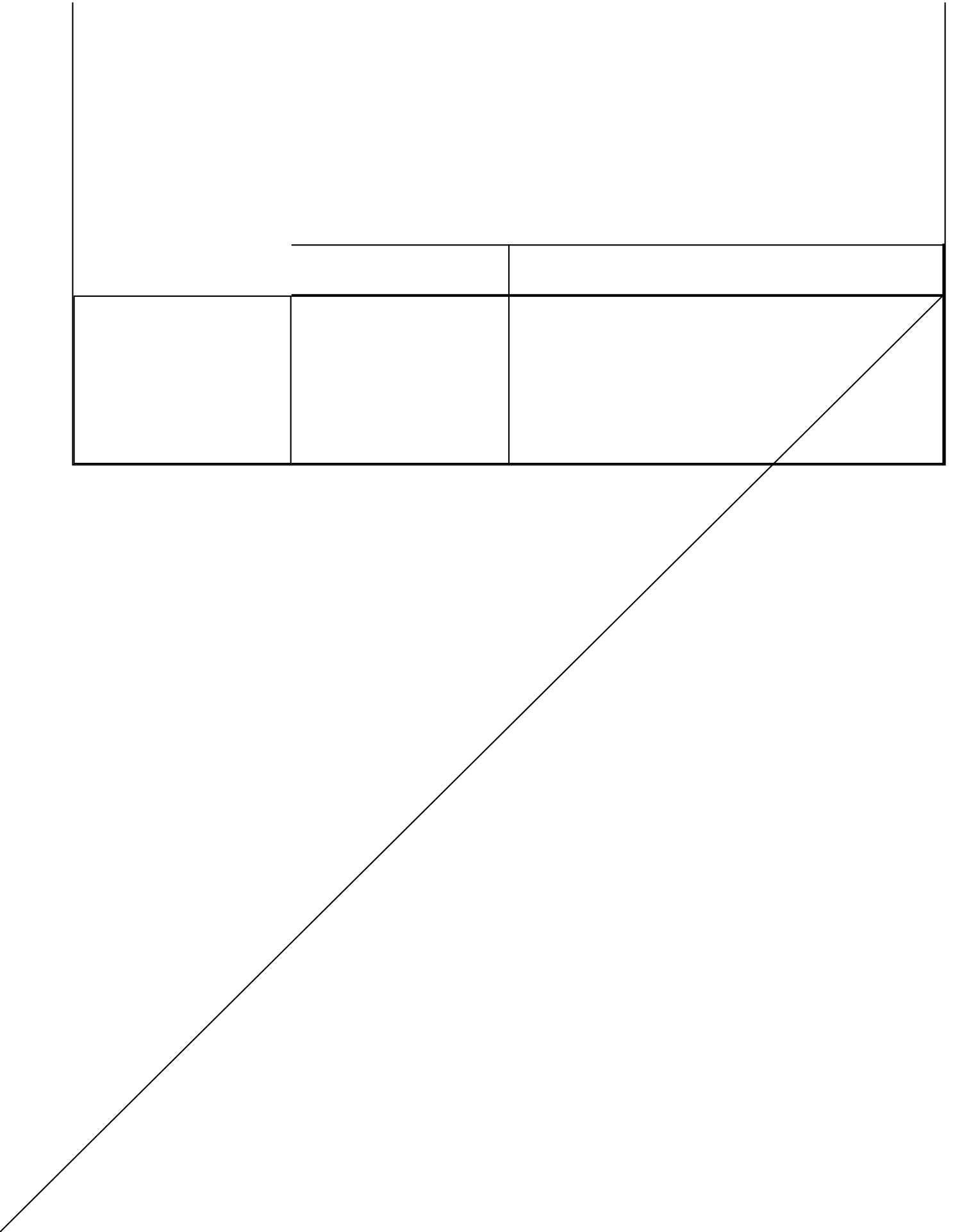
7j S_ bW'5'gh XYbhgi Va]hg'Ub'YggUm(, \ci fg'UbX'%'a]bi H'g'UZf'h\Y'ghdi `UH'X'XYUX`]bY" H\Y'YggUm

7 ci fgY'GWXYXi `Y

J jk Wdgg Hja YhUV`Y

Hja YhUV`Y`

8UH	HmdY	7cbhYbh
K YY_% '&' 'i `m! '&- 'i `m	A cXi `Y	bfcXi W]cb`hc`gdYWU`YXi W]cb`fYgYUfW. WcbXi W]b[`U`]hYfUhi fY`gYUfWž5D5`ghmYž`ci fbU` Ufh]WY`Zcfa Uh 9h.]W`]ggi Yg:]b`gdYWU`YXi W]cb. WcbXi W]b[fYgYUfW`k.]h.]i`bYfUV`YgYUfW]k]gž]BiU]g]bWY`dcdi`U]cbg; GHU]Ya Ybhcb`9h.]W`7cbXi W]b`<i a Ub`F YgYUfWž I BGK`<F`%o`%o
WcbXi W]b[`U`]hYfUhi fY`gYUfWž5D5`ghmYž`ci fbU`		
GHU]Ya Ybhcb`9h.]W`7cbXi W]b`<i a Ub`F YgYUfWž		



F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

[Fi a f`žD"8"ž7cc ž6": "ž/`K \]Ymž5"@"f&\\$%4"DWeWsdJZ \[ebWU\[S^WgUSfa` , 6WeY` e\[WZaVe\[S` V Sbb^USfa`e"](#)

F YWca a YbXYX`F Ygci fWg

7fYgk Y`ž>"K "ž/`Dchž7"B" f&\$% Ł`CgS{fSf[hW;` cg[dk S` V DWeWsdJZ 6WeY` , 5Zaae[Y 3_a` Y 8[hW 3bbdaSUZWe"(h`9X]hcb"@cbXcb. G5; 9"

:]YXž5" f&\$%) Ł`6[eUahWd[Y efSf[ef[Ue ge[Y ;4? E B E E efSf[ef[Uež@cbXcb. G5; 9"

I WTe[fW

DU`Ubrž>" f&\$%* Ł`E B E E Egdh[hS^? S` gSžGmXbYm`5`Yb/` I bk]b"

F Uj]hXžG"A "ž/`7UfžB"A" f&\$%* Ł`CgS{fSf[hWDWeWsdJZ, 4dVY[Y fZW5a` UWbfgS† FZWadWf[US† S` V ? WZaVa`āY[US^@cbXcb. G5; 9"

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

H\]g`]g`hY`žfghgYa YghYf`h]g`Wci fgY`]g`VY]b[`cZYfYX"

⇒a U[Y`7fYX]h

GmbYf[]Yg`]b`Gci bX`&\$%*

7F ⇒CG

7F ⇒CG`Dfcj]XYf`7cXY. \$\$\$- , ;