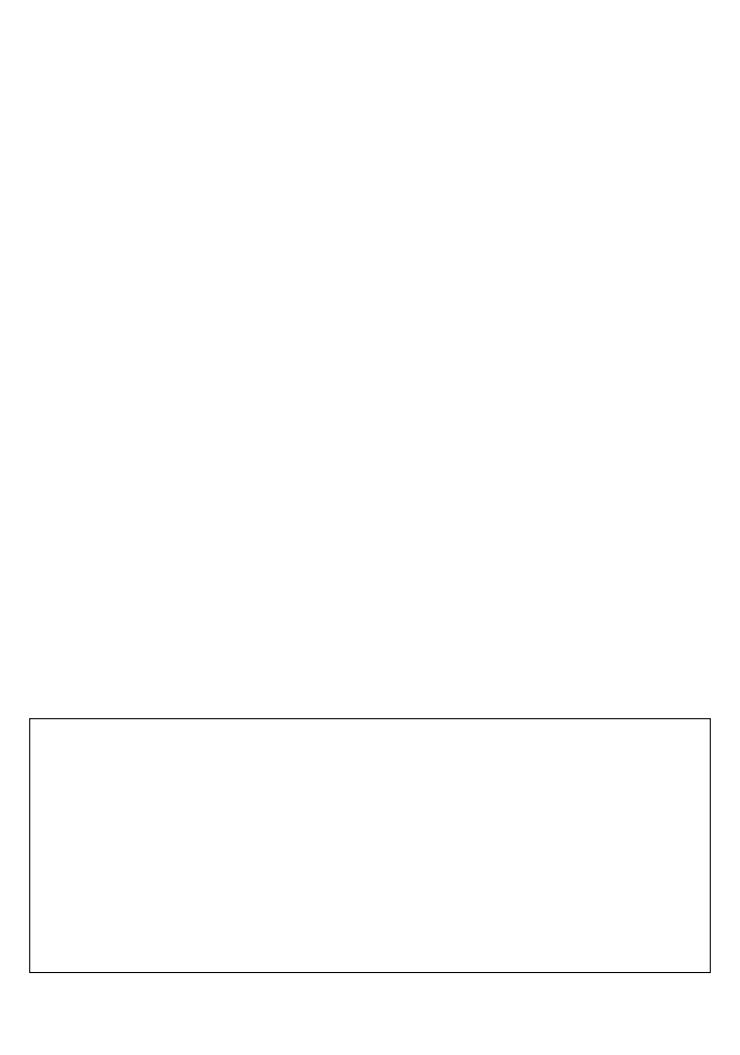
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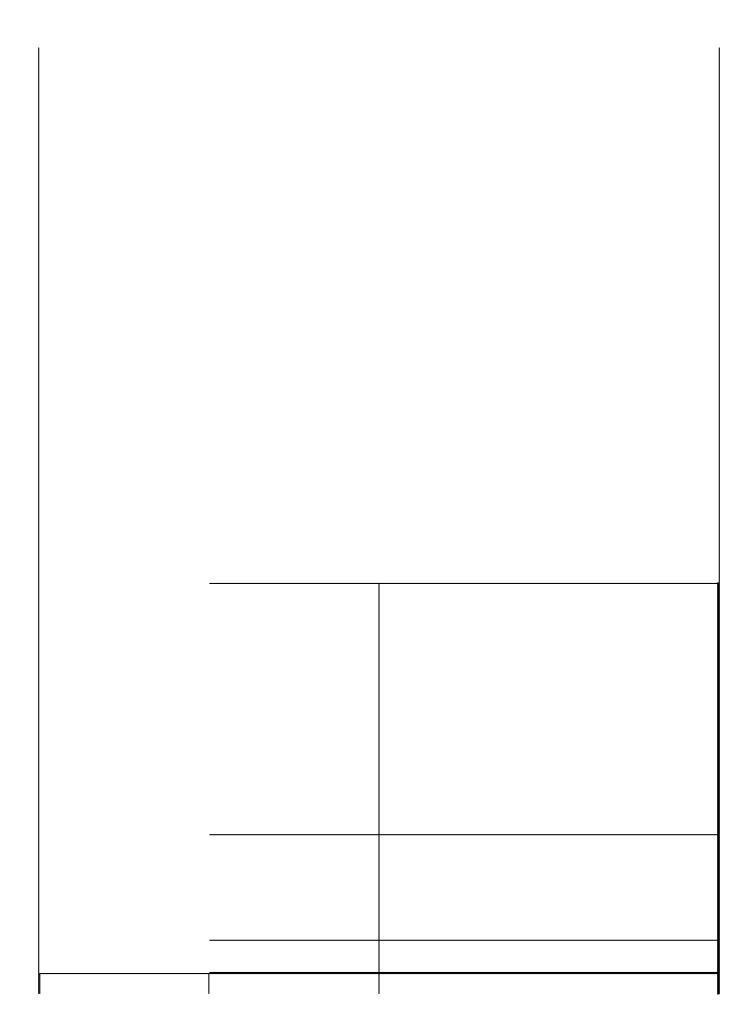
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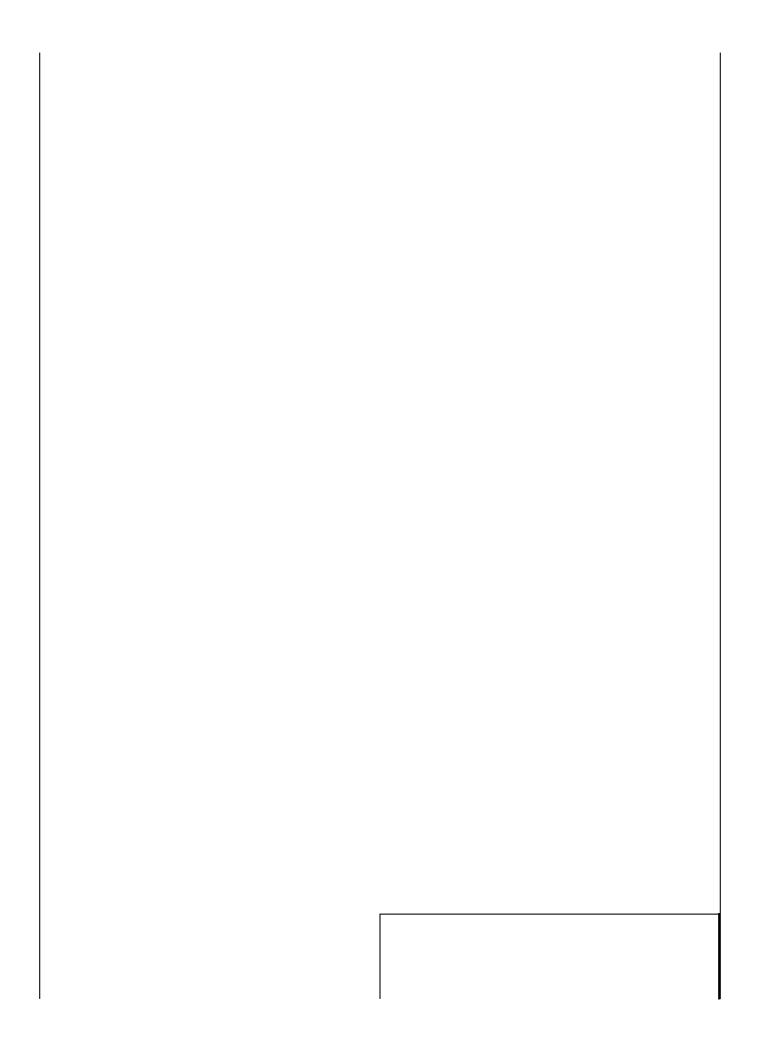
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: YYXVUW_cb^h\Y`Wci fgY^]g^[Uh\YfYX'dYf]cX]WU``mi g]b['j Uf]ci g^a YUbgž]bWi X]b['h\Y'I BGK a m9I dYf]YbW' dfcW'ggž]bZcfa U``X]gW gg]cb^]b^h\Y`Z]bU``WUgg^Zcf^h\Y`Wci fgYžUbX'h\Y`GW\cc^*g Gh XYbh#GhUZZa YYh]b[g"'Mci f^ZYYXVUW_]g^hU_Yb^gYf]ci g`mžUbX'Wcbh]bi U``]a dfcj Ya Ybhg^UfY a UXY^hc^h\Y Wci fgY^VUgYXž]b^dUfhžcb^gi W\ZYYXVUW_"

± h\]g'\ki fqYžfY\\bh]a dfc| Ya Ybhq'fYqi h|b| 'Zfca 'qh XYbhZYYX\U\\']b\\ XY.

%" G`]XYg`i dXUhYX`k]h\`Wc`ci f!WcXYX`VUW_[fci bXg`hc`]XYbh]Zm`Yl Ua]bUV`Y`a UhYf]U` &" +bWfYUgYX`h\Y`bi a VYf`cZk cf_YX`Yl Ua d`Yg ' " @YWn fY`bchYg`Uj U]`UV`Y`df]cf`hc``YWn fYg

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Gi Va]gg]cb cZ5ggYgga YbhHUg_g

K cf_'gi Va]hh/X``Uh/`k]h\ci h\Ub'\Uddfcj YX`gdY\\JU``\Wcbg]XYfUh]cb`cf`YI h/bg]cb`\Vmh\Y`\Wci fgY`\WccfX]bUhcf`cf XY`Y[Uh/X`Ui h\cf]hm]g`gi V^Y\Whrc`U``Uh/`dYbU`hmcZ) i `a Uf_`fYXi \W]cb`dYf`XUmž\\WddYX`UhZ]j Y`XUmg`f\\\$\\$\ci fgŁ`Zfca `h\Y`UggYgga YbhXYUX`]bYž\UZh/f`k\]\W``U`gh XYbh\\Ubbchgi Va]h\Ub'\UggYgga Ybhž\\cbg]gh/bh k]h\`I BGK `5ggYgga Ybh\=a d`Ya Ybh\Jh]cb`Dfc\WXi fY"

H\Y^UHY^dYbU`hm`]g`Udd`]YX`dYf`WU`YbXUf`XUmf]bWi X]b[`k YY_YbXg`UbX`di V`]W\c`]XUmgŁ'h\Uh'h\Y UggYgga Ybh`]g`cj YfXi Y"`H\YfY`]g`bc`dfc!fUhU`cZh\Y``UhY`dYbU`hm`Zcf`gi Va]gg]cbg`a UXY`dUfhk Umh\fci [\'U\XUm'

K cf_'gi Va]hh'X`'UZhYf'h\Y`'XYUX`]bY`Zcf''UVgc`i hY`ZU]''`]g'bchUWWdhYX`'UbX`'U'a Uf_'cZnYfc`k]```VY`'Uk UfXYX Zcf'h\Uh'UggYgga Ybh']hYa "

: cf`gca Y`UggYgga Ybh`]hYa gž`U``UhY`dYbU`hma Umbch`VY`Uddfcdf]UhY"`H\YgY`UfY`WYUf`m`]bX]\WUhYX`]b`h\Y Wci fgY`ci h`]bYž`UbX`gi W\`UggYgga Ybhg`fYWY]j Y`U`a Uf_`cZnYfc`]Zbch\Wca d`YhYX`Vmh\Y`gdY\\JZ]YX`XUhY" 9I Ua d`Yg`]bWi XY.

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V"''C b`]bY'ei]nnYg'k \YfY'Ubgk Yfg'UfY'fY'YUgYX'hc'gh XYbhg'cb'Wca d'Yh]cbž'cf

W'`DfcZYgg]cbU``UggYgga YbhihUg_gž'k \YfY`h\Y`]bhYbh]cb`]g`hc`WfYUhY`Ub`Ui h\Ybh]WUggYgga Ybhih\Uh\\Ug`UbUVgc`i hY`gi Va]gg]cb`XUhYž'cf

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

 $\label{thm:continuous} IBGK ``Ug`Ub`cb[c]b[`Wcaa]haYbhhc`ZcghYf]b[``U`W``hifY`cZ`YUfb]b[`]bZcfaYX`VmUWUXYa]W]bHY[f]hm'`5``IBGK `ghiXYbhg`UjY`U`fYgdcbg]V]`]hmhc`UX\YfY`hc`h\]g`df]bW]d`Y`cZUWUXYa]W]bHY[f]hm'D`U[]Uf]gaibXYfa]bYg`UWUXYa]W]bHY[f]hmUbX`]g`bchhc`YfUhYX`UhIBGK "`B'SY[Sde_SfG@EI[eVW{`WSege[YfZW_aXSekagdai`ž$

Mci 'UfY'U'gc'fYa]bXYX'h\UhWUfYZ ``h]a Y'a UbU[Ya Ybh]g'Ub']a dcftUbhdUfhcZgh XmUbX'cbY'cZh\Y]XYbh]Z]YX'WUi gYg'cZd`U[]Uf]ga ']g'dccf'h]a Y'a UbU[Ya Ybh'Gh XYbhg'g\ci `X'U``ck 'gi Z]W]Ybh'h]a Y'Zcf fYgYUfW\žXfUZ\]b['UbX'h\Y'dfcdYf'fYZYfYbW]b['cZgci fWYg']b'dfYdUf]b['U``'UggYgga Ybh'lUg_g''

₹d`U[]Uf]ga i]gʻZci bXi]bimci fik cf_ik \Ybimci 'UfYi]bʻZ[fghmYUfžimci fi`YWi fYfik]``cZYfimci 'Ugg]ghUbWYihc
]a dfcj Yimci fi'UWUXYa]Wg_]``g'''H\Yma UmUg_imci ihci`cc_'Uhigca Yicb`]bYifYgci fWygžiUhhYbXih\Yi@YUfb]b[
7 YbhfYžcfigca Yh]a YgifYgi Va]himci fik cf_ik]h\h\YidfcV`Ya iZ[l YX'''< ck Yj Yfia cfYigYf]ci gi]bghUbWygi]biZ[fgh
mYUfžigi W\ugighYU`]b[iUbch\Yfighi XYbhgik cf_icfidUm]b[igca YcbYihciXcimci fik cf_žia UmVYi]bj Ygh][UhYX
i bXYfih\YiGhi XYbhA]gWcbXi WhDfcWYXi fYg''

FYdYUHYX'd`U[]Uf]ga 'fYj Yb']b'Z|fghmYUfłź'd`U[]Uf]ga 'UZHYf'Z|fghmYUfźcf'gYf]ci g']bghUbWYgža Um'U`gc'VY]bj Ygh][UhYX'i bXYf'h\Y'Gh XYbhA]gWcbXi WhDfcWYXi fYg"'H\Y'dYbU'h]Yg'i bXYf'h\Y'dfcWYXi fYg'WUb']bWi XY U'fYXi Whcb']b'a Uf_gž'ZU]`]b['U'Wci fgY'cf'Zcf'h\Y'a cghgYf]ci g'a UhHYfg'fi]_Y'd`U[]Uf]ga ']b'Ub'\cbci fg h\Yg]gŁYj Yb'gi gdYbg]cb'Zfca 'h\Y'i b]j Yfg]mm''H\Y'Gh XYbhA]gWcbXi WhDfcWYXi fYg'UfY'Uj U]`UV'Y'\YfY.

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a dcfhUbhi@]b_g

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(<u>191 Ua g</u>

(Eddfcj YX'7 U'W 'Uhcfg

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D9%%7cadfY\Ybg]j Yž'h\YcfmVUgYX'i bXYfgHJbX]b['cZh\Y'i bXYfd]bb]b['bUhi fU`'UbXd\mg]WJ`'gWJYbWYg'UbX'h\Y'Yb[]bYYf]b['Z bXUaYbHJ`g'Udd`]WJV`Y'hc'h\Y'Yb[]bYYf]b['X]gWJd`]bY	
D9%"&"7 cbWYdhi U``i bXYfghJbX]b['cZh\Y'a Uh\Ya Uh]Wgžbi a Yf]WJ``UbU`mg]gžghJh]gh]WgžUbX Wca di hYf'UbX']bZcfa Uh]cb'gW]YbWYg'k\]W\'i bXYfd]b'h\Y'Yb[]bYYf]b['X]gW]d`]bY	
D9%" `±0!XYdh\`i bXYfghUbX]b['cZgdYW]U`]ghVcX]Yg`cZ_bck `YX[Y`k]h\]b`h\Y`Yb[]bYYf]b[X]gW]d`]bY	
D9%"('8]gWYfba YbhcZ_bck 'YX[Y'XYj Y`cda YbhUbX'fYgYUfW\'X]fYWJcbg'k]h\]b'h\Y Yb[]bYYf]b['X]gWJd`]bY	
D9%") '? bck `YX[Y'cZYb[]bYYf]b['XYg][b'dfUWf]WY'UbX'WcbHYl hi U``ZUWcfg']a dUWf]b['h\YYb[]bYYf]b['X]gW]d`]bY	
D9%"*`I_bXYfgHJbX]b[`cZh\Y`gWcdYz`df]bWjd`Ygz`bcfa gz`UVWci bHJV]`]hjYg`UbX`Vci bXg`cZ gi gHJ]bUV`Y`Yb[]bYYf]b[`dfUWfJWY`]b`h\Y`gdYWjZJWX]gWjd`]bY	
9b[]bYYf]b['Udd`]WUh]cb'UV]`]hm	
D9&"%5dd`]WUh]cb`cZYghUV`]g\YX`Yb[]bYYf]b[`a Yh\cXg`hc`Wca d`Yl `Yb[]bYYf]b[`dfcV`Ya gc`j]b[
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