

7 ci fgY Cj Yfj]Yk

GHJZZ7cbHJWh8YHJ]`q

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`] m	@cWUh]cb	D\cbY
H\Ya V] [·] 8i VY	9	H\ifgXUm%&da cf VmUddc]bhaYbh	H65	H65

GW.cc`7cbhJWh =bZcfa Uhlcb

GWXcc`cZ<ia Ub]hYg'UbX'@Ub[iU[Yg

@cWUhjcb. 'GW\cc`'C ZZj\\xizA cfj Yb'6fck b'6i]`X]b[z'@Yj Y``&z\&),

CdYb]b[< ci fg. A cbXUm!: f]XUmž-Ua !!) da

D\cbY. Ž*%'&'-',) '%*, %

: UI . Ž*%'&'-',) ', +\$)

9a U]`. \<u>U`4 i bgk "YXi "Ui</u>

5 h Yb X Ub WY F Yei] f Ya Yb h g

5 qh XYbh]q Yl dYWYX hc UhYbX U``WUqq WcbhUWi\ci fq Zcf U ZUW!hc! ZUW! fl & L'cf V YbXYX Wci fqY UbX WeadYhY'U``'UWAj]hYq'Zef'U'VYbXYX'cf'Z ``micb`]bY'WeifqY"

5 gh XYbhk\c'Uff]j Ygʻa cfY h\Ub′%) a]bi hYgʻ`UhYʻa UmVY dYbU`]gYX Zcf'bcb!UthYbXUbVW" Zgi VX U'dYbU`hm]g^]a dcgYXz*h\Y`ghi XYbha i ghVY`]bZcfa YX`j YfVU``mUhh\Y`YbX`cZWUgg^UbX`UXj]gYX`]b`k f]h|b['k]h\]b`&(\ci fg"

ZUʻgh XYbhYl dYf]YbW'gʻ]`bYggža]gUXj Ybh fYʻcfʻch\YfʻcVW ffYbW h\Uha U_YgʻUVgYbW Zfca ʻU WUgg#JWNj jmi buj cjXUV`Yžcf`YI dYWmg`hc`VY`UVgYbhZfca`U`Zcfh\Wcajb[`WUgg#JWNj jmz`h\Ymg\ci`X`gYY_ dYfa]qq]cb Zfca 'h\Y'7 ci fqY'5i h\cf]|mz'UbX'k\YfY'Udd`]WUV`Yz'h\Y]f`fYei Yqhq\ci `X'VY'UW\can dUb]YX'VmUb cf][|bU`cf`WfHZYX`WcdmcZU'a YX]WU`WfHZWJHY`cf`ch\Yf`Zcfa `cZUddfcdf|UHY`Yj |XYbW/"

5 7 ci fqY 5 i h\cf|lma UmYl W qY U qhi XYbh2fca WUqqYq cf UWlij |h|Yq Zcf i d hc cbY a cbh\" < ck Y j Yfz h\Ym a UmUgg][b'UXX]hcbU`UbX#cf'U`hYfbUh]j Y'hUg_g'hc'Ybgi fY'Wca d`]UbWY"'5'7 ci fgY'5i h\cf]hmWcbg]XYf]b['h\Y [fubhb[cZuvqYbWraighvYrguhqZ]YXrurgh XYbhk]```qh]```VYruv`Yrbc'a YYhrh\YrWcifqY'q``Yufb]b[cihWcaYq UbX#cfjciaYcZYUfb]b["5 gh XYbhgYY_]b['Uddfcj U`hc VY UVgYbhZcfa cfY h\Ub cbY a cbh\ a i ghUdd`m]b'k f]hb['hc'h\Y'8YUb'UbX'dfcj]XY'U```cf][]bU``cf'WYfhZYX'gi ddcfhb['XcW a YbHJhcb"

cfacfy]bzcfaUt]cbUVcihthYUthYbXUbWYdfchcVc`g]bthYY:UW`tmcZ5fhgUbX'GcWJU` GWYbWrg. \htdg.#k k k "Uffig"i bak "YXi "Ui #W ffYbhah XYbha#UWJXYa \\mathbb{W}\delta Zcfa Uhcb#dfchcWc\a![i \]XY\\delta Ya#

5 WUXYa | W = b Zcfa Uh|cb

: cf`YggYbhJU``ghi XYbh`]bZcfa UhJcb`fY`UhJb['hc. 'fYei Yghg`Zcf`Yl hYbg]cb/fYj]Yk 'cZa Uf_g/cWW dUhJcbU``\YU`h\UbX`gUZYhm'Yl Ua]bUhJcb'dfcWYXi fYg/gdYWJU``Wcbg]XYfUhJcb`]b'h\Y'Yj YbhcZ]``bYgg`cf`a]gUXj Ybhi fY/ghi XYbhYei]hmUbX`X]gUV]`]hm'UbX`ch\Yf`YggYbhJU``UWUXYa]W]bZcfa UhJcbž gYY`\hdg.#k k k "Ufhg"i bgk "YXi "Ui #W ffYbhghi XYbhg#JWUXYa]W]bZcfa UhJcb#dfchcWc`g![i]XY`]bYg#

7ci fgY 8YHJ] g

7 fYX]hDc]bhg *

Gi a a UfmcZh\Y'7ci fgY

Gi VYWn5fYU. >[Yg[ef[Ue

H\]g`]g`Ub`]bhfcXi WcfmWci fgY`]b`d\cbc`c[m—h\Y`gmghYa Uh]Wgh XmcZh\Y`gci bX`gmghYa `cZ`Ub[i U[Y"`H\Y Wci fgY`UXXfYggYg`ei Ygh]cbg`gi W\`Ug. K\UhUfY`h\Y`X]gh]bWhji Y`gci bXg`]b`U``Ub[i U[Y3'<ck `Xc`h\YgY gci bXg`]bhYfUWhk]h\`YUW\`ch\Yf3'=hk]```ZcW g`cb`H\W\b]ei Yg`cZd\cbc`c[]\W\``UbU`mg]g\"Hcd]\Wg`]bWi XY. d\cbc`c[]\W\``dfc\W`ggYg`UbX`U`hYfbUh]cbgž'bUhi fU``WUggYg`cZgdYYW\`gci bXg`UbX`X]gh]bWhji Y`ZYUhi fYgž gm`UV]Z\\Whjcbž'UbX`h\Y`fc`Y`cZa cfd\c`c[mUbX`gmbhUl`]b`d\cbc`c[]\W\``gmghYa g\"`\Ci k]``\Uj Y`h\Y cddcfhi b]hmhc`UbU`mgY`d\cbc`c[]\W\``XUhU`Zfca '9b[`]g\`UbX`U`j Uf]YhmcZX]ZZYfYbh`Ub[i U[Yg\"```

5 hh Y WcbWi g]cb cZh]g Wci fgY h Y gh XYbhk] ` VY UV Y hc

- %" 91 d`U]b`\ck 'd\cbc`c[]\W\`i b]\mathbf{g}\UfY`cf[Ub]\gYX\f]\b\Wi X]\b['b\Uhi f\U\`\W\UggYg\cZgdYY\\\'gci b\Xg\tilde{X}\tilde\tilde{X}\tilde{X}\tilde{X}\tilde{X}\tilde{X}\tilde{X}\tilde{X}\t
- &" 5bU`mgY`VUg]Wd\cbc`c[]WU``XUHJ`UbX`Uf[iY'h\Y'a Yf]hg`cZh\Y`UbU`mg]g"
- " 5ddfU]gY'h\Y'gHfYb[h\g'UbX'kYU_bYggYg'cZX]ZZYfYbh\mdch\YgYg'UVcihh\Y'bUhifY'cZd\cbc'c[]WU`UfW\lhYWnifY"
- ("8YacbglfUhY`\ck`d\cbc`c[m]g`]bh]aUhY`mWcbbYWhYX`hc`ch\Yf`XcaU]bg`cZ`Ub[iU[Y`glfiWhifY]bWhX]b['acfd\c`c[mUbX`gmbhUl"

HYUW]b[GhfUhY[]Yg

H\]g`Wci fgY`]g`Ub`]bhY[fU``Wca dcbYbhcZh\Y``]b[i]gh]Wg`i bXYf[fUXi UhY`W ff]W`i a "'\docfXYf`hc`i bXYfghUbX h\Y`UVghfUWh_bck `YX[Y`h\Uhi bXYf`]Yg`h\Y`Wca dYhYbW'`cZh\Y`gdYU_Yfz`]h]g`YggYbh]U``hc`i bXYfghUbX`\ck h\Y`gci bX`qmqhYa `]q`cf[Ub]qYX"

5ggYgga Ybh

5ggYgga Ybh'HUg_g

5ggYgga Ybh'hJg_		

Gi Va]gg]cb cZ5ggYgga YbhHUg_g

Gh XYbhg UfY Yl dYWYX hc di hh\Y]f bUa Yg UbX gh XYbhbi a VYfg cb Yj YfmdU[Y cZh\Y]f Ugg][ba Ybhg"

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

#mci YbWci bhYf'U'dfcV'Ya k \Yb'UhYa dhJo['hc'gi Va]hmci f'Ugg][ba Ybhh\fci [\'Hi fb]h]bž'd'YUgY
hY'Yd\cbY'9| hYfbU'Gi ddcfhcb'-',) "''' %cf'Ya U]'h\Ya 'cb'<u>Yl hYfbU'hY'hgi ddcfh4 i bgk "YXi "Ui"</u>"'Gi ddcfh
\ci fg'UfY', .\$\$Ua '-'%\$.\$\$da 'cb'k YY_XUmg'UbX'-.\$\$Ua '-').\$\$da 'cb'k YY_YbXg'fl *) 'XUmg'U'mYUft'''#mci
UfY'i bUV'Y'hc'gi Va]hmci f'Ugg][ba YbhXi Y'hc'U'ZJi 'hk]h\'Hi fb]h]b'mci 'a Um'Udd'mZcf'Ub'Yl hYbg]cbž'Vi hmci
a i ghfYhJ]b'mci f'h]W_Yhbi a VYf'Zfca '9| hYfbU''Gi ddcfhfU'cb['k]h\'Ubmch\Yf'fY'Yj UbhXcW'a Ybhgt'hc
]bWi XY'Ug'Yj]XYbWY'hc'gi ddcfhmci f'Yl hYbg]cb'Udd']WUh]cb'''#mci 'Ya U]''9| hYfbU''Gi ddcfhmci 'k]''
Ui hca UhJWJ'`mfYWY']j Y'U'HJW_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k]'''bYYX'hc'gdYWJZJWJ'`mUg_'Zcf'cbY''
Hi fb]h]b'U'gc'dfcj]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'gfUh' g'cb'Hk]hYf"

; YbYfU`mž'UggYgga YbhitUg_g'a i ghVY'gi Va]hhYX'Y`YWfcb]WU``mj]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ba Ybh''=b']bghUbWfg'k \YfY'h\]g']g'bchdcgg]V`Yž']hk]```VY'ghUhYX'cb'mci f'Wci fgY'g'A ccX`Y'g]hY'k]h\U`hYfbUh]j Y'gi Va]gg]cb'XYhU]`g"

@UhY 5ggYgga Ybh'DYbU`h]Yg

Gh XYbhgʻUfYʻfYgdcbg]V`YʻZcfʻh\Yʻgi Va]gg]cbʻcZUggYgga YbhhUg_gʻVmh\YʻfYei]fYX`XUhYgʻUbXʻhJa Yg" 8YdYbX]b[ˈcZh\Y`YI hYbhcZXY`Um]bʻh\Yʻgi Va]gg]cbʻcZUbʻUggYgga YbhhUg_ʻdUghh\Y`Xi Y`XUhY`UbXʻhJa Yž

- K cf_'gi Va]hh'X`%\$`hc`% 'XUmg`UZhYf`h\Y`gh]di `UhYX`XYUX`]bY`k]```VY`UggYggYX`UbX`ZYYXVUW_dfcj]XYX`Vi h'U`a Uf_'cZnYfc`k]```VY`fYWcfXYX"`\Zh\Y`k cf_'k ci `X`\Uj Y`fYWf]j YX`U'dUgg`a Uf_'Vi h'Zcf h\Y``UhYbYgg`UbX`h\Y`k cf_']g`U`Wca di `gcfm'Wci fgY`Wca dcbYbh'f\i fX`Y`fYei]fYa Ybh\ž`U'gh XYbhk]``VY`XYYa YX`hc`\Uj Y`a Yhh\Uh'fYei]fYa Ybh\
- K cf_'gi Va]hhYX`&\$`cf`a cfY`XUmg`UZhYf`h\Y`gh]di `UhYX`XYUX`]bY`k]```bchVY`UWWdhYX`Zcf UggYgga YbhUbX`k]```fYWY]j Y`bc`ZYYXVUW_ža Uf_'cf`[fUXY"'=Zh\Y`UggYgga YbhHUg_']g`U`Wca di `gcfm Wca dcbYbhcZh\Y`Wci fgY`U'ghi XYbhik]```fYWY]j Y`Ub`l bgUh]gZJWcfmi: U]``fl : Ł`[fUXY`Ug`U`fYgi `hcZ i bgUh]gZJWcfmidYfZcfa UbWY`]b`Ub`YggYbh]U``Wca dcbYbhcZh\Y`Wci fgY"

H\]g^]bZcfa Uh]cb^]g^U^gc^Uj U]^\$

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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"'\lefi\Wb'hU_Y`a Ubm Zcfa gžZfca `XY`]VYfUhY`W\YUh]b['hc`UVW]XYbhU`mWcdm]b['Zfca `U`gci f\W' k]h\ci hUW_bck `YX[Ya Ybh'

IBGK [fcidgdu[]uf]ga]bhch\YZc``ck]b[WuhY[cf]Yg.

7 cdm]b[.'i g]b['h\Y'gUa Y'cf'j Yfmg]a]`Uf'k cfXg'hc'h\Y'cf][]bU`hYl h'cf']XYU'k]h\ci h'UW_bck `YX[]b['h\Y gci fW'cf'i g]b['ei chUh]cb'a Uf_g"'H\]g'U`gc'Udd`]Yg'hc']a U[Ygž'Ufh'UbX'XYg][b'dfcYWhgž'Ug'k Y``'Ug dfYgYbhUh]cbg'k \YfY'gca YcbY'dfYgYbhg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci h'WfYX]h'

±DUddfcdf]UhY`dUfUd\fUg]b[.'W\Ub[]b['U'ZYk'kcfXg'UbX'd\fUgYg'k\]`Y`acghmfYhJ]b]b['h\Y`cf][]bU`ghfi WhifY`UbX`]bZcfaUh]cb`k]h\ci hUW_bck`YX[YaYbh'H\]g'U`gc'Udd`]Yg`]b'dfYgYbhUh]cbg'k\YfY`gcaYcbYdUfUd\fUgYg`Ubch\Yf'g`]XYUg`cf'kcfXg'k]h\ci hWfYX]h''±iU`gc'Udd`]Yg`hc'd]YW]b['hc[Yh\Yf'ei chYg'UbXdUfUd\fUgYg`]bhc'U'bYk'k\c`Yžk]h\ci hfYZ/fYbW]b['UbX'U'ghi XYbh'g`ck b'UbU`mg]g`hc'Vf]b['h\Y`aUhYf]U`hc[Yh\Yf''

7 c``i g]cb. 'k cf_]b['k]h\ 'ch\ Yfg'Vi h'dUgg]b['c\Z'h\ Y 'k cf_'Ug'U'dYfgcb'g']b\X]j]\Xi U``k cf_"'7 c``i g]cb'U`gc]b\Wi XYg'dfcj]\X]b['mci f'k cf_'hc'Ubch\ Yf'ghi XYbh\ VYZcfY'h\ Y 'Xi Y 'XUhYzcf'Zcf'h\ Y' di fdcgY'cZh\ Ya d`U[]\Uf]g]b['Uh\Ubmh]a Yz'dUm]b['Ubch\ Yf'dYfgcb'hc'dYfZcfa 'Ub'U\WUXYa]\Wh\Ug_z'ghYU']b['cf'U\\ello i]f]b[Ubch\ Yf'dYfgcb'g' U\WUXYa]\Wk cf_'Ub\X'\\ello dm]b[']hz'c\ZYf]b['hc'\\ello a d`YhY'Ubch\ Yf'dYfgcb'g' k cf_'cf'gYY_]b[d\una Ybh\Zcf'\\ello a d`Yh\beta d`

±bUddfcdf]UhY`W]hUh]cb.`7]h]b[ˈgci fW/gˈk \]WX`\Uj Y`bchVYYb`fYUXžk]h\ci hUW_bck`YX[]b[ˈh\Y`″gYWcbXUfm″gci fW/Zfca k \]WX`_bck`YX[Y`cZh\Ya`\Ug'VYYb`cVhU]bYX"

8 i d`]\WUh]cb`ff`gY`Zld`U[]\Uf]ga "Ł`gi Va]\h]b[`mci f`ck b`k cf_ž]b`k \c`Y`cf`]b`dUfhžk \YfY`]h`\Ug`dfYj]ci g`m VYYb`dfYdUfYX`cf`gi Va]\hYX`Zcf`Ubch\Yf`UqqYqqa Ybhcf\Wci fgY`UhI_BGK_`cf`Ubch\Yf`i b]\Yfq]\m"

7 cffYWhfYZYfYbWb[dfUWhWyg.

• VYHYfa UbU[Ymcifh]a Y

7ci fgY GWX YXi `Y

J]Yk WUgg ha YhUV Y

H]a YtUV`Y

8 UhY	HmdY	7 cbhYbh	
K YY_"%"&" ">i `m'!"&- ">i `m	@YWh fY	±blfcXi Wjcb UbX D\cbYljVg	
K_YY_`&.'' \$`>i `mi!')	@YWh fY	D\cbYfj\Vg	
5i [i gh	Hi hcf]U`	⇒blfcXi Wgcb7 D\cbYljWg	
K YY_'' . '* '5i [i gh! '‰	@YWhifY	D\cbYa]W5bU`mg]g`f\Ł	
5i [i gh	Hi hcf]U`	D\cbYrJVg	
K YY_'(.'%'5i[igh!'%	@YWn fY	D\cbYa]W5bU`mg]gʻf⊨Ł	
5i [i gh	Hi hcf]U`	D\cbYa]W5bU`mg]g	
K YY_').'&\$'5i[igh!'&*	@YWn fY	D\cbc`c[]\WJ`: YUhi fYg	
5i [i gh	Hi hcf]U`	D\cbYa]W5bU`mg]g	
K YY_'*.'&+'5i[igh!'&	@YWn fY	A cfd\c`c[m	
GYdhYa VYf	Hi hcf]U`	D\cbc`c[]\WJ``: YUhi fYg	
K YY_'+.'' 'GYdhYa VYf'!'-	@YWn fY	D\cbc`c[]\WJ``5`HYfbUHjcb`fk	
GYdhYa VYf	Hi hcf]U`	A cfd\c`c[m	
K YY_', .'%\$'GYdhYa VYf'!	@YWn fY	D\cbc`c[]\WJ``5`HYfbUH]cb`f\\	
%* 'GYdhYa VYf	Hi hcf]U`	D\cbc`c[]\Wj`5`hYfbUhjcb	
K YY_''%+'GYdhYa VYf'!	@YWn fY	A cfd\cd\cbYa]Wg	
&' 'GYdhYa VYf	Hi hcf]U`	D\cbc`c[]\W``5`H\fbUH]cb	
6fYU_, '&('GYdhYa VYf'! ' \$'GYdhYa VYf			
K_YY_^%\$.^%^CWcVYf^!^+	@YWhifY	DfcXi Wjj]hm	
C Whc VY f	Hi hcf]U`	A cfd\cd\cbYa]Wg	
K_YY_"%%", "C_WhcVYf"!"%(@YWhifY	A cfd\c`c[mUbX`GmbHJl	
C Whc VY f	Hi hcf]U`	DfcXi Wjj]hm	
K_YY_^%&.^%) ^C WcVYf^!	@YWn fY	Gi a a UfmUbX 7 cbWi g]cb	
&%'CWhcVYf	Hi hcf]U`	A cfd\c`c[mUbX`GmbHJI	
K YY_'%'.'&&'CWcVYf'! &,'CWcVYf	Hi hcf]U`	F Yj ‰	

Υ

FYgci fWYg

DfYgWf]VYX F Ygci fWYg

FYWca a YbXYX FYgci fWyg

• 6cc_'-'D\cbc`c[m]b'[YbYfUh]jY'[fUa a Uf`f% - (Ł