

7ci fgY[·]Cj Yfj]Yk

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7cbj Ybcfg

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+bhYfbUhJcbU``GYW filmi\Ug'hfUX]hJcbU``mVYYb'UbU`mgYX'h\fci [\'fbYcŁfYU`]ghih\YcfYhJWU``ZfUa Yk cf g'h\Uh ZcW g Y I Wi g]j Y`mcb h\Y`ghUhY`Ug`h\Y`fYZYfYbhcZgYW f]mžUbX`]bj Ygh[[UhY`]ggi Yg`Ug`h\Y`WUi gYg`cZk Uf`UbX Ufa YX`WcbZ]Wbz`U``]UbWrgz`ghfUhY[mbz`Ufa g`Wcblfc``UbX`XYhYffYbWr"'5h'h\Y`gUa Y`ha Yz`±bhYfbUh]cbU` FY`Unjcbg`gW.c`Ufg`\UjY`Uf[iYX'h\Uh'h\YgY'bUffck ž'ghUhY!W\bhf]WUbX`a]`]hUfm\W\bhf]WUddfcUW\Yg`hc ayw film-"UbX'h,y'WcbWdhq'UbX'X]qWci fqyg'h,ymfy'mcb'-'UfY'XYYd'm]a d'iWUhYX']b'h,y''ja dyfjU'!fUWU' cf][]bg'cZ+''UbX'i bUV'Y'bc'Yb[U[Y'k]h\'WbhYa dcfUfmgYW f]mrWbbWfbg'fY`UhYX'bc']ggi Yg'gi W\'Ug Wla UHY 1 ghlWYZYbj lfcba YbHU gYW fllmž ZccX gYW fllmž h\Y 6 UW @| Yg A UHYfa cj Ya YbHžXlglbZcfa UHcbž Yh\b]Wghf]ZYžh\Y'Yj c`i hjcb cZhYffcf]ga žh\Y Wcfc``Uf]Yg cZ]bhYfj YbhjcbžUbX h\Y gYW f]hjgUhjcb cZa][fUbhg UbX'fYZ [YYgž'Uacb[ghch\Yfg"'H\]g'WcifgY'dfci]XYg'U'Wf]hWU'YjU'iUhlcb'cZh\Y'hfUX]hcbU''gYWif]hm qhi X]Yq`qWkc`Ufq\]dž'UbX`]bhfcXi Wyq`qhi XYbhq`hc`Wf]hWU``UddfcUWkYq`hc`qYWif]hmž`]bWi X]b['ZYa]b]qhž dcgh/xc`cb]U`ždcghghfi Whi fU`]ghžUbX`Ya UbW]dUhcfmh\YcfYh]WU``ZfUa Yk cf_g`h\UhYI hYbX`VYmcbX`k UfZUfY`UbX YI Ua]bY`X]j YfgY`a cXYfb`gYWf]hm]ggi Yg"`K Y`k]```UbU`mgY`X]ZZYfYbhgYhg`cZWf]hJWU``h\YcfYhJWU``UddfcUW\Yg UbX'YI d`cfY'h\Y]f'UbU`mh\WU`i h\]mmfUg'k Y```Ug'UbmiV]UgYg#V`]bX'gdchgEVmi]bj Ygh[Uh|b['fY`Yj Ubh\WUgY qhi X]Yq'UbX'WcbhYa dcfUfmgYW f]lmiX]Ya a Ug"'C | YfU"ž'h\Y'Wci fqY'k]"'YbUV'Y'mci 'lc'fYWc[b]qY'WcfY X]ZZYfYbWYg'VYłk YYb'Wf]h]WU`gYW f]lmigWkc`Ufg\]d'UbX'lfUX]h]cbU``gYW f]lmigh X]Yg/]XYbh]ZmUbX'Yj U`i UhY Wf]h]WU``h\Ycf]Yg`cZgYWf]lmžUbX`Udd`mih\Ya`hc`WcbhYa dcfUfmYj Ybhg`UbX`]ggi Yg`]b`[`cVU``dc`]h]Wg"

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6`YbXYX``YUfb]b['YbWci fU[Yg`X]j Yfg]lmcZ`YUfb]b['UWlj]ljYg`UbX`U`gc`X]j Yfg]lmi]b`UggYgga Ybh'`H\]g Wci fgY`Wcbg]grg`cZk YY_`m`Uf[Y![fci d``YWi fYgžk YY_`mgYa]bUfgž'UbX`cb`]bY``YUfb]b['UWlj]ljYg`fY`Uljb['fc X]ZZYfYbrik YY_`mlcd]Wg"`H\Y`k YY_`m`YWi fYg`UfY`\][\`m]bhYfUWlj Y`UbX`a Um]bWi XY`lh\Y`dfYgYbfUljcb`cZ j]XYc`W]dgž'ga U``![fci d'UWlj]ljYgž'fYUX]b['[fci dgž'E / 5 'gYgg]cbg'UbX'dU]f!k cf_"`H\Y``YWi fYg`UfY XYg][bYX`hc`gi dd`Ya Ybh']bXYdYbXYbrigh Xmcb'h\Y`Wci fgY`h\UriVY[]bg`fVi rig\ci `X`bchYbXŁ'k]lh``WcgY Yb[U[Ya Ybrik]lh`'h\Y`k YY_`mfYei]fYX`fYUX]b[g"

K YY_`mhi hcf]U`g`U``ck `ghi XYbhg`hc`X]gWi gg`ei Ygh]cbgž'h\Ya Yg`UbX`]ggi Yg`Uf]g]b[`Zfca `h\Y]f`]bXYdYbXYbh ghi Xmž'Ug`k Y```Ug`dfcj]X]b[`h\Y`cddcfhi b]hmhc`Yb[U[Y`]b`dfcXi Whj Y`X]gWi gg]cb`k]h\`h\Y]f`dYYfg`UbX`hc dUfh]W]dUhY`]b`U`fUb[Y`cZghfi Whi fYX``YUfb]b[`UWhj]h]Ygž]bWi X]b[`[fci d#dU]f#|bX]j]Xi U``UbU`mh]WU``k cf_ž Zcfa U``UbX`]bZcfa U``XYVUhYgžUbX`a]b]!dfc`YWhg"

Cb`]bYž']b'a cghk YY_gžmci 'UfY'fYei]fYX'hc'Wca d`YhY'gdYW]ZWcb`]bY'`YUfb]b[''UWfj]h]Yg'fC@5gŁ'Ug]bX]WUhYX'cb'A ccX`YžVYZcfY'mci 'UhhYbX'h\Y'gYa]bUfg'Zcf'h\cgY'k YY_g"'H\YfY']g'U`gc'U'fUb[Y'cZcb`]bY fYgci fWYg'gdYW]ZWhc'YUW\k YY_fg'hcd]Whc'Yb\UbWY']bXYdYbXYbh`YUfb]b['''=U`gc'dfcj]XY'U'bi a VYf'cZ fYgci fWYg'fY`UhYX'hc'ghi Xmg_]``g'UbX'fYgYUfW\k'']hYfUWh'

5ggYgga Ybh

A cfY`XYHJ]`g`k]```VY`a UXY`Uj U]`UV`Y`cb`A ccX`Y"

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 $\label{thm:conditional} $$H\Y'HU_Y'<ca\Y'9I\ Ua\]bUh]cb'k\]^*UggYgg'Wci\ fgY'a\ UhYf]U'ž'UbX'VY'Yj\ U'i\ UhYX'cb'h\Y'VUg]g'cZU'fi\ Vf]W''H\Yfi\ Vf]Wk\]^*VY'Uj\ U]`UV'Y'Uh'h\Y'ghUfhcZhYfa'hc'U'`ck'gh XYbhg'hc'k cf_'hck UfXg'WYUf'ghUbXUfXg'''Gh XYbhg k\]^*YfYWY]j\ Y'U'bi a\ Yf]WU''[\ fUXY'k\]h\]b'&'k\ YY_g'cZgi\ Va\]gg]cb'''$

5XX]h]cbU`XYhJ]`g

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K YY_'% '% 'GYdhYa VYf	@YWhifY	±blfcXi Wjb['GYW f]miGhi X]Yg	
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K YY_"&."% "GYdhYa VYf !"&" "GYdhYa VYf	@YWhifY	; YbXYf'UbX'J]c'YbW'fl Ya]b]gh'5ddfcUWXYg'hc ±bhYfbUh]cbU`'GYW f]mt'	
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K YY_" ."&* "GYdhYa VYf !" \$"GYdhYa VYf	@YWhifY	a dYf]U``GYW f]mmfDcghWc`cb]U``5ddfcUWXYg`hc abhYfbUh]cbU``GYW f]mhz`	
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		@7 7,?`_%7TeZdRafS]ZTY`]ZURjžYVcVhZ] SVbc``]jY#]b dYfgcb``YWhifY`_eYZdURjž3acVŽ cVT`cUVU]VTeCVhZ]SVfa]`RUVUWcj`fe'gZVh RYVRU`WEYVefe'cZR]dWceYZdhVV\ž	
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K YY_")."%\$"C WhcVYf"! %("C WhcVYf	@YWhi fY	<pre>< i a Ub'GYW f]mmf@JVYfU`'5ddfcUWXYg'hc ±bhYfbUh]cbU`'GYW f]mnŁ</pre>	
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Ghi XYbhYj U'i Uhji Y'ZYYXVUW_']g'[Uh\YfYX'dYf]cX]\WU``mi g]b[ž'Ua cb['ch\Yf'a YUbgž'h\Y'I b]j Yfg]\mig'A m 9| dYf]Yb\W'dfc\W'gg"' \delta Zcfa U``ZYYXVUW_'UbX'ZYYXVUW_gdY\WZ]\Wrc 'U'dUfh]\W'`Uf'hi rcf]U``rcd]\Wk]```VY k Y`\Wca YX'UbX'Yb\Wci fU[YX'Xi f]b['h\Y'hYfa "'Ghi XYbhZYYXVU\W_']g'hU_Yb'gYf]ci g`m'UbX'\Wcbh]bi U`\Yb\Ub\W'a Ybhg'UfY'a UXY'rc ``YUfb]b['UbX'hYU\X]b['U\Wjj]h]Yg'cb'h\Y'VUg]g'cZghi XYbhZYXVU\W_"

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

D`U[]Uf]ga i]gii g]b[ih\Yik cfXgicfi]XYUgicZch\YfgiUbXidfYgYbh]b[ih\Ya iUgimci fick b"i±i\WbihU_Yia Ubm Zcfa gžZfca iXYi]VYfUhYiW\YUh]b[ihciU\W]XYbhU`m\Wcdm]b[iZfca iUigci f\Wik]h\ci hiU\w_bck iYX[Ya Ybh'

IBGK [fcidg'd'U[]Uf]ga]bhc'h\Y'Zc``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'hYI hcf']XYU'k]h\ci hUW_bck 'YX[]b[h\Y'gci fW'cf'i g]b['ei chUh]cb'a Uf_g"'H\]g']bWi XYg'Wcdm]b['a UhYf]U'gž]XYUg'cf'WcbW'dhg'Zfca 'U Vcc_ž'Ufh]WYž'fYdcfhcf'ch\Yf'k f]hHYb'XcW a Ybhž'dfYgYbhUh]cbž'Wca dcg]h]cbž'Uffk cf_ž'XYg][bž XfUk]b['z'W]fWi]hfmž'Wca di hYf'dfc[fUa 'cf'gcZhk UfYž'k YVg]hYž']bhYfbYhž'ch\Yf'Y'YWfcb]WfYgci fWYž'cf Ubch\Yf'dYfgcbfq'Uqq][ba Ybhk]h\ci hUddfcdf]UhY'UW_bck 'YX[Ya Ybh'
- \pm 0Uddfcdf]UhY dUfUd\fUg]b[. '7\Ub[]b['U'ZYk 'k cfXg'UbX'd\fUgYg'k\]Y'a cghmfYhU]b]b['h\Y

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