

7ci fgY^{*}Cj Yfj]Yk

GHJZZ:7cbHJWh:8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`] m	@cWUhjcb	D\cbY	
@UYhjhjU^B Ubei YhhY	` <u>"bUbei YfffY4 i bgk "YXi "Ui</u>	6mUddc]bha Ybh UbX:CZ]WY:\cifg. HiuYeg&ddang:%dap:!p&p da cb:HYUag	U	-',) ++-& pppppp	, p p p

GWXcc`7cbHJWhi±bZcfa Uh]cb

GWVcc``cZhV'5fhg`UbX`AYX]U

 $\label{eq:final_problem} Fcca " \ensuremath{\text{\ensuremath{\text{\%}}}} \hbox{$\underline{\text{$z$}$ eVYfhK YVghYf'6i]$X]b["f] $\%$ $$ $\ensuremath{\text{$\xi$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$ $$ $$ $\ensuremath{\text{$Y$}}$ $$ $\ensuremath{\text{$Y$}}$$

D\cbY.`f\$&Ł'-',) '(,)*

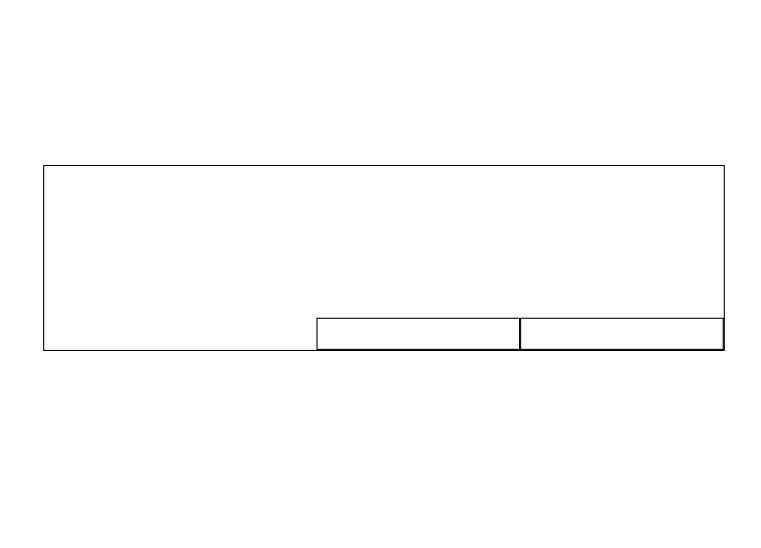
9a U]`. 'gUa 4 i bgk "YXi "Ui

K YVg]hY. k k k "Ufhg"i bgk "YXi "Ui #gUa

5W_bck `YX[Ya YbhcZ7ci bhfm

I BGK '5fhgž'8Yg][b'UbX'5fW]hYWhifY'?Ybg]b[hcb'UbX'DUXX]b[hcb'WUadigYg'UfY'Vi]hhcb'5Vcf][]bU`

7 ci fgY 8 YHJ]`g I b]hg cZ7 fYX]h** Gi a a UfmcZh\Y 7 ci fgY



5 hmy b X Ub WY F Yei] f Ya Yb hg

 $\hbox{Ghi XYbhg'UfY'ghfcb[`m'YbWc'i fU[YX'hc'UhhYbX'U```WUggYg'UbX'fYj]Yk'``YWhi fY'fYWc'fX]b[g''' } \\$

7ci fgY'GWXYXi `Y

J]Yk 'WUgg'ha YhUV'Y

H]a YtUV`Y

8 UhY	HmdY	7 cbh/bh
K YY_'%'% 'GYdhYa VYf !'%+'GYdhYa VYf	@YWhi fY	#alfcXi WhchinchNY WeifgY. hNY ``]hYfUfmZ]Y `X UbX `]hYfUfmdf]nYg
	GYa]bUf	H\Y'BcVY```YWn fY'Vm6cV'8mUb'UbX'>Ua Yg

		±bHYfj]Yk 'VmG]a cbY'A i ffUmcb'567	
K YY_'*.'% 'C WvcVYf'! &&'C WvcVYf	F YUX]b[: `YI]V]`]mik YY_`fbc`WUggYgŁ	
K YY_'+. '&) 'C WcVYf'!	@YWn fY	7 Ybgcfg\]d	
&- 'C WhcVYf	GYa]bUf	7 Ybgcfg\]d'k]h\'U'ZcW'g'cb'7\]bU'UbX'=fUb"	
		H\Y`WYbgcfg\]d`cZGU`a Ub`Fig\X]Yfg` YV ReR_Z GVcdVd"	
		G\cfhghcfmVmA c Mub"	
K YY_', . '%Bcj Ya VYf'!) Bcj Ya VYf	@YWn fY	C f]YbHJ`]ga	
	GYa]bUf	=blfcXi Wgcb′Zfca 'GU]Xž'9XkUfX"K "'7cZV_eR]Zd^	
		GY`YWIjcb`cZhU`Yg`Zfca` YV 4``\`WR' Y`fdR_U @ZXYedR_UR@ZXYe`G]f`F]WXUfX`6ifhcb'g hfUbg`Uhjcb	
K YY_'', 'Bcj Ya VYf'!	@YWn fY	HfUbg`Uhjcb	
‰Ɓcj Ya VYf	GYa]bUf	GY`YW]cb`cZhU`Yg`Zfca` YV 3cRSZR_ @ZXYed, <i gu]b`<uxxuk="" mfg`hfubg`uh]cb<="" td=""></i>	
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K YY_'%\$.'%) Bcj Ya VYf	@YWn fY	K cfX``]hYfUhi fYgʻ	
!'% 'Bcj Ya VYf	GYa]bUf	DcYa gʻVm; fUbUnʻA ci gUj]	
		±olfcXi WgcbiZfca i8Uj]Xi8Ua fcgWXiH YRe;dHìd]U >ZeVcRefdV1	
		±bj]hYX'gdYU_Yf'hc'h\Y'gYa]bUf.'G\c`Y\'K c`dÅ fБаYf]WUb'hfUbg`UhcfŁ	

FYgci fWfg

DfYgWf]VYX F Ygci fWYg

GYY'@Y[Ubhc'`]gh

FYWca a YbXYX FYgci fWYg

GYY'@Y[Ubhc'``]gh

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

 $H\ [g']g'h\ Y'gYWcbX'mYUf'h\ Y'WcifgY']g'fibb]b[''''H\ Y'WcifgY'k]``Wcbh]biY'hc'VY'fYj]Yk\ YX'UbX'fYj]gYX']bf YgdcbgY'hc'ZYYXVUW_Zfca'ghiXYbhg'UbX'hYUW]b['ghUZ''$

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Gi Va]gg]cb cZ5ggYgga YbhHUg_g

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

; YbYfU``mž'UggYgga YbhiHug_g'a i ghVY'gi Va]hhYX'Y`YVWfcb]\W)``mij]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ba Ybh'' =b']bgHJb\W'g'k \YfY'h\]g']g'bchdcgg]V`Yž']hk]```VY'gHJhYX'cb'mci f'\\circ i fgY'g'A ccX`Y'g]hY'k]h\U`hYfbUhjj Y'gi Va]gg]cb'XYHJ]`g''

cfi]bZcfa Uhjcbicbi\ckihcigi Va]hUgg][ba Ybhgicbi]bYij]UiA ccXiY.i\hdg.#gh XYbhi bgk "YXi "Ui #\ck! gi Va]hUgg][ba Ybha ccXiY

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

D`U[]Uf]ga i]gii g]b[ih\Yik cfXgicfi]XYUgicZch\YfgiUbXidfYgYbh]b[ih\Ya iUgimci fick b"i=iWUbihU_Yia Ubm Zcfa gžZfca iXYi]VYfUhYiWXYUh]b[ihciUWW]XYbhU`mWcdm]b[iZfca iUigci fWYik]h\ci hiUW_bck iYX[Ya Ybh'i

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