- 1422!C>"F! Q2%T47'*0!., /*04(3!4\$3!.04(2'\$'!HeJ,\$\$'220!G\$#?"3*&, /(*+"(E\$0L(A4=3&3*", '"(\$*(B ""; -, (C3.\$,;)(7.-#&; \$0!6,)*'(!S(')'\$*'3!4*!*0'!., /*0'4)*'(\$!: (<04',2,8%<42! R,\$-'('\$<'0!A4; S40!12,(%345!!
- 1422!C>"F! Q2%T47'*0!., /*04(3!4\$3!.04(2'\$'!HeJ,\$\$'220!G\$#?"3*&, /(*+"(E\$0L(A4=3&3*", '"(\$*(B""; -, (C3.\$,;0!12, (%340!6,)*'(!S(')'\$*'3!4*!*0'!12, (%34!: \$*0(, S, 2, 8%<42!., <% '*+! R,\$-'('\$<'0!A422404))''0!12, (%34V!4\$3!*0'!., <% '*+!, -!Q*0\$,7%,2,8+!R,\$-'('\$<'0! J '\$&'(0!R,2,(43,5)!)
- *

B^* = , <*", D-, %&*&+'"*, +#>&<C"&<"*>, "E&, '="

C>CC!	!!!!!!!!!!!! : (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3! : (<04',2,8%<42!.**'!LN6`"M!
C>C>!	: (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3!: (<04',2,8%<42!.%*'!LN6`"M!
C>"N!	: (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3!: (<04',2,8%<42!.%*'!LN6`"M5!
C>"D!	: (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3!: (<04',2,8%<42!.%*'!LN6`"M5!
C>"=!	: (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3!: (<04',2,8%<42!.%*'!LN6`"M5!
C>"C!	R ,01%'23! J %('<*,(0! B 4;,0!Q*O%,S%45!!
C>""!	: (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3!: (<04',2,8%<42!.%*'!LN6`"M5!
C>""!	R ,01%'23! J %('<*,(0! B 4;,0!Q*O%,S%45!!
C>>P!	: (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3!: (<04',2,8%<42!.%*'!LN6`"M5!
C>>N!	R ,01%'23! J %('<*,(0! B 4;,0!Q*O%,S%45!!
C>>?!	: (<04',2,8%<42!1%'23!J%('<*,(0!X''3'\$!`)24\$3!: (<04',2,8%<42!.%*'!LN6`"M5!
C>>?!	R ,01%'23! J %('<*,(0! B 4;,0!Q*O%,S%45!!
C>>D!	R ,01%'23! J %('<*,(0! B 4;,0!Q*O%,S%45!!
*	
* . 4	ヽ ル ∠ C'' _ 9 D & * & 9 ∠ D'' + ∠ _ '' ! D * '' 9 D'' # 9 ¢ 0/ D _ D''

<u>:9A!C>>>!I!`\$*(,3/<*\,\$!*,!:\$*0(,S,2,8+!I!B'\$'(42!Q3/<4*\,\$!R,/()'</u>!

1422!C>>F0!C>=0!C>>D0!C>>20!C>>P0!C>"0!C>"0!C>"C0!C>"F0!C>"F0!C>"=0!C>"b0! C>"D0!C>"?0!C>"N0!C>C>0!C>C"0!C>CC0!C>CF!

.S(\\$8!C>>=0!C>>b0!C>>D0!C>>P0!C>">0!C>""0!C>"C0!C>"=0!C>"b0!C>"D0!C>"?0! C>"N0!C>"P0!C>C>0!C>C"0!C>CC0!C>CF!

	0"*10 2"35"B34 45/4F/"J"=1K3.5L145"/0"+456./K/I/MH"J"*13N6F4M"+22F25345" 04',2,8%<42!1% !.<0,,2!!
<u>/,, (</u> !(<	./;; (!"PF
<u></u>	
	1!-!%1\$.*
7	#)'0!1-'& *(3*-(#&.*34(1'''%*-%')&*,!&!1-5#1/*
D*,%<+	' "%, B, +%#> \$<=& <c"< td=""></c"<>
	12, $(\$34!]/;$ $\$\%')!G(,43<4)*\$8!], S'!W'3\$4!B(4\$*0!6(,_'<*!:3\&\%), (0!65`5!6,2)*4!$ B2+ $\$0!#$ \$3' (,/\$3!] $\$$)*, (+5!!
>"P0C>CF!	94*%,\$42!.<% <'!1,/\$34*%,\$0!.'\$%,(!\')'4(<0'(0!65`5!Z4*0(+\$!:(*0/(0!1(,\$*%'(! E4\$3)<4S')!4];R,;;/\$%*+!\')S,\$)')0!9gU!GR.0"P"DPF5!!
>">0C>"=!	94*%, \$42!% <'!1, /\$34*%, \$0!: (<04', 2, 8+!6(, 8(4; !LhCbN0DFPM0!#/P-:&:"Q/64"A:" +.567.0!W4* 'd!R5!R/(*%)0!4\$3!65`5!Z4*0(+\$!: (*0/(5!A*2'30!: \$!Q*0\$, 4(<04', 2, 8%<42! .*/3+!,-!*0'! : ;, !R4)*'!+)*'; !%\$!,/*0d')*'(\$!Q*0%, \$%40!9.1g0!GR.0">C?D>?5!!
>>D0C>>N!	$94^{**}, 842! Q\$: 1; '\$!-, (!*0'!] / ; 4\$\%'')!B(4\$'!Lh''=N@PD>M@! # /P-:\&:"Q/64"A:"+.567.@!$ W**0'd!R5! (**)@!4\$3!65`5!Z4*0(+\$!: (*0/(5! A*'30!! \$!Q*\$,4(<04',2,8%<42!.*/3+!,-!*0'!B4;,!R4)*'!.+)*'; !\\$!.,/*0d')*'(\$!
>>D0C>>?!	Q , S%4 ℓ !9C gU!\ i0b>b?b0>D! 9 , \$42!.< <' <' !1, /\$34*%, \$ ℓ !: (<04', 2, 8+!6(, 8(4; !LhbP ℓ D>>M ℓ !-:&:"Q/64" A:"+.567. ℓ ! R 55`5!Z4*C \$!: (*0/(ℓ !\$3!W4**O'd!R5!R/(*%)5!!
>>b0C>>P!	A $3U! : \$!Q$ $\$, 4(<04', 2, 8\%<42! .*/3+!, -!*0'!B4; .!R4)*'!.+)*'; !\%\$!., /*0d')*'(\$!Q$, S%40!LQ $!!g>b0"=>bM5!$ 9 , $\$42!.< <'!1, /\$34\%, \$0!: (<04', 2, 8+!6(, 8(4; 0!LhPb0">>M0!-:&:"Q/64"A:"+.567.0!R 55!Z4* -$!: (*0/(!$
PP?0"PPN!	A! 3U!A, + .!E4\$3!R(/%)'(!Bc!-,(!4\$!Q*0\$,4(<04',2,8%<42!.*/3+!,-!*0'!B4;,!R4)*'! ;!%\$! '*0d')*'(\$!Q*0%,S%40!LGR.!g>b0C>PPPM5!! 94 \$42!\$<'!1,/\$34*%,\$!J%))'(*4*%,\$!`;S(,&';'\$*!B(4\$*!Lh""@P?F5b>M0!-:&:"Q/64"
rr (0 rrn:	94 \$42!. \$<'!1,/\$34*%,\$!J%))'(*4*%,\$!`;S(,&';'\$*!B(4\$*!Lh""@P?F5b>M@!-:&:"Q/64" A .567 A% R'(Q*0\$,4(<04',2,8+!4;,\$8!*0'!B4;,!,-!),/*0d')*'(\$!Q*0%,S%4!L.G\!g!<br P? W
PPD!	P? .%8)'!.<%'\$*%-% \')'4(<0!.,<%'*+@!B(4\$*)0%\$0:%3!,-!\')'4(<0!Lhb"b5 >M@! -:&: " Q/0 567. 5"
D*,%<+	' "₿,% E\$<=& <c"< td=""></c"<>
D *,%<+ >"P!	B , $\%$ E S <= α < C 1 ($\%$ ', X ' '3, $\$$!`)24\$3!L1HX`M!*, !: X`: \Q θ !`\$<5!LhF θ >>M θ ! -:&:"Q/64" A:"+.567. θ ! ($43/4*'$!8(4\$*)!4\$3!_/\$%, (!4(<04',2,8+!)"94-1473, ',<,\$0.20.2(3:)-0.2T80

b

&<*, %<+'"E\$<=&<C"

- C>C>! #\$%&'()%*+!,-!.,/*0!12,(%34!.*5!6'*'()7/(8!`\$*'(\$42!: d4(3)!6(,8(4; !Lh=@Cb>M5!-:&:" Q/64"A:"+.567.:"
- C>"?! #\$%&'()%*+!,-!.,/*0!12,(%34!`\$*'(\$4*%,\$42!A(4&'2!B(4\$*0!Q/(,S'4\$!W''*%\$8!,-!:\$<%'\$*! R'(4;%<)0!G,(3'4/[0!1(4\$<'!Lh"0bP"M5!-:&:"Q/64"A:"+.567.:"
- $C >> b! ! \# \$ \& '() \$ + !, -!., /*0!12, (\$ 340!.*5!6'*'()7/(80!9'd!` \$ \&') \ast 84*, (! \ ')'4(<0!B(4\$*! Lh=0)>>> M0!: d4(3'30!-:\&:"Q/64"A:"+.567.0!R, 065`5!Z4*O(+\$!:(*0/(5!)))))$
- $C>>=! ! # $\k ()\++!, -!., /*0!12, (\+340!A4; S40!9'd!^$\+ 065^5!Z4*0(+$!: (*0/(5!)) + (<0!B(4)) + (*0!B(4)) + ($
- C>>F! #\$\%'()*+!,-!.,/*0!12,(\%34!`\$*'(\$4*\%,\$42!A(4&'2!B(4\$*\?!.,<\\'*+!,-!:-(\\<4\$\)*!

- $\begin{array}{l} \texttt{E}, / \texttt{h} & \texttt{E}, / \texttt{h} & \texttt{E}, / \texttt{h} & \texttt{E}, / \texttt{h} & \texttt{H}$
- C>CC! : \$<\`\$*!J9:!4\$3!J''S!6,S/24*\`,\$!.*(/<*/('!\\$!)/70

9+"(B&3'-, 3&, (N#'+\$"-.-/&3*!\\$!4!)S'<\42!\))/'!,\$!*0'!<,\$*(\7/*\,\$)!,-!^4;')!.a\7,5!

- C >> C! + .567. V"Q/64" A 5!6, **'(+!#)'0: 2*'(4*%, \$!4)!4\$!`\$3%<4*, (!, -!., <%, '<, \$, ; %<!.*4*/)U!: \$! Q*0\$, 4(<04', 2, 8%<42!.*/3+!, -!*0'!B4;, !, -!Q*0%, S%40!0-4#, \$.(-2(N#'+\$''-.-/&'\$.(<''*+-;(\$,;(9+''-#00!PL=MU!FF'')Fbb5!)])

- \$ @ ' &B>, ="@ ? ? **R**"#>+-*, %**B**"

- $C >> b! \qquad ! \qquad + .567. \mathbb{V}^{0} Q/64^{"} A : !4\$3! Z4^{*}0(+\$! X ' '3 ; 4\$5! Q^{*}0\$, 4(<04', 2, 8+\ell!G\$, ;= W(-2(N\#'+\$''-.-/\&'\$.(<''*+-;3\ell!'3)*'3!7+!]'(7'(*!W4<0\$'(\ell!:2*4W)(4!6('))5!))))$
- !

@??R''%,)&,AB''

- $C>">! + .567. V"Q/64" A 5!9+"(0-4#, $.(-2(*+"(>-0$.(N, *+#-6-.-/\&'$.(C, 3*\&*4*"0!K, 25!"D5! \ '\&\%' d!, -!A '\&$.(!+$, /"($,;(*+"()?-.4*\&-,(-2(!"#$%&'(:#-;4'*\&-,($,;(8\&3*#\&=4*\&-,(\&,($(<<0)(!-%%4, \&*0!7+!J '4$!Q5!:($,230!#$%&'())*+!6('))!, -!R, 2, (43, 0!C>>N5!)]$
- $C>>N" + .567.V"Q/64"A5"9+"(X\&?$D(K,2/; '(YZH[K0! \ '&%'d!,-"N#'+$"-.-/&'$.(N, *+#-6-.-/OL(:'#36"'*&?"3(-,(<"*+-;($,;(9+"-#0!'3%*'3!7+!^4; ')!W5!.a%7,0!W%<04'2!X5!B(4&')0!$ 4\$3!W%(%4;!A5!.*4(a0!#\$%&'()%*+!,-!:(%T,\$4!6('))0!C>>?5"
- "
- <? < P-, %'',) &, A, ="-\$@'&#+*&?<B!!
- C>"P! ! + **.567**. V''Q/64''A 5!R'2'7(4*%\$8!: (<04', 2, 8+!W, \$*05!9+"(N..&\$, '"(2-#(B""'; -, (C3.\$, ;(N#'+\$"-.-/&`\$.(>"3"\$#'+(\$, ;()); 4'\$*&-, (R"53."**"#0!W4+5!)]
- C>"D! ! +.567. $V''Q/64''A5!#.1.6!R, $*\%$/')!*, !\')'4(<0!6('<,2/;7\%4$!E\-'d4+)!4*!*0'!$ $X ''3,L'M$!`)24$3!.*'0!9+"(N..&$, '"(2-#(B""'; -,(C3.$,;(N#'+$"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3"$#'+($,;(); +3"-.-/&'$.(>"3")")])$
- $C>"F! \qquad ! \qquad + .567. \mathbb{V}[Q/64"A5!: (<04', 2, 8\%<42!^{&'})*\%84*\%, $)!4*!X'3'$!^)24$3!LN6`"M5!9+"($ $N..\&$, ''(2-#(B''''; -, (C3.$, ;(N#'+$''-.-/&'$.(>"3''$#'+($, ;(); 4''$*&-, (R''53."**''#D!W4+5!!)])] \\ \times (-1)^{(1)} + (-1)^{($

- C>>C! E47, (4*, (+!\')'4(<00!Z,\$), !Q*0\$, 4(<04', 2, 8%<42!6(,_'<*0!94*%, \$42!W/)'/; !,-! Q*0%, \$%40!: 33%)!: 7474!LJ'<'; 7'(M5!!

C>>C!

- $1'75!C>"?! :-*3D(E'''#D(:-##&;/''3D($,;(7''$3*&,/(2#-%(*+''(A$+$#$(*-(*+''()*+&-6&$,(G&/+.$,;30!)); **'3!S4S'(!S(')'$*'3!*,!*0'!9'd!j,(a!#$&&'()*+!A0'!^$)**/*'!-,(!*0'!.*/3+!,-!*0'!); **'3!S4S'(!S(')'$*'3!*,!*0'!9'd!j,(a!#$&&'()*+!A0'!^$)**/*'!-,(!*0'!.*/3+!,-!*0'!); **'3!S4S'(!S(')'$*'3!*,(a)0,S!.+$*0')%)!%$!6,**'(+!:$42+)%)U!A0'!A'<0$&<42!4)!4!6,(*42!*,!*0'!..,<&420!Q/64"A:"+.567.5!$

!

<+*&?<+'"-%, B, <*+*&?<B""

: S(%2!C>"D!

9,&5!C>>D!	$\begin{aligned} A*\$, ;\$\#; \&b\$\&-, (\&, (\$(A*\#\$*\&2\&''; (A - '\&''*0L(N, ()*+, -\$\#'+\$'' /\&'\$.(:''\#36'''*\&?''(2\#-\%(*+''(I\$\%(-2(A-4*+5'''3*''\#, ()*+\&-6\&\$)!Q/64''A:''+.567.0!6(')'\$*'3!4*!*0'!: ; '(\&<4\$!: $$*0(, S, 2, 8\&<42!:)), <&4*\%, \$!W''*\$\$\$0!.4\$!^{,})''!'' \\ \end{aligned}$
: S(%2!C>>D!	$A^{\$}, ; \$^{\#}; \&b\$^{\ast}\& -, (\$^{\ast}(*+''(C, ; \&?\&; 4\$.D)(@\&\$/''D(\$, ; (>''/\& -, \$.(A'\$.''3.U(N, ()))))))))))))))))))))))))))))))))))$
: S(%2!C>>b!	$ \begin{array}{l} .+; S,) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
: S(%2!C>>b!	$N_{,()}^{*+}, -\$^{\#'} +\$^{''-}/\&' \$.(A^{*4}; 0(-2(*+''(^{3''}(-2(A6\$'''(\&, (<\$^{*''\#\&\$.(!4.*4\#''(-2(!\$3*''(A^{*+4}))))))))))))))))))))))))))))))))))))$
: S(%2!C>>b!	$ \# \$3'()*4\$3\$\$8!], /)'0, 23!6, S/24*\$, \$!*0(, /80!R'(4; \$$
^/\$'!C>>=!!	$! \$3^{*''3}(\&, !N2\#\&'\$c(N, () *+, -\$\#'+\$''/\&'\$.(A^{*4}; 0(-2(*+''(1\$\%-(:''-6.''(\&, (A-4^{*}+5'')3^{*''}\#, ())^{*}+\&-6\&\$0!Q/64"A:"+.567.0!Z4^{*}(+\$)^{5}!X''3; 4\$0!64S'(!6(')'\$''3!4^{*}!^{*}0'!., <\!$
: S(%2!C>>=!!	$: -**''\#0(A^{*0}.''(\&, (\$(!\$3^{*''}(A - '\&''^{*}OL(N, ()*+, -\$\#'+\$''/\&'\$.(A^{*4}; 0(-2(*+''(1\$\%-(-2(A^{*+5}))^{*''})))))))))))))))))))))))))))))))))))$
: S(%2!C>>F!!	$N2\#\&'\$, (E\#''53L(C; '', *\&20\&, /(*+''(A - '\&\$.(\$, ;() ' - , -\%\&'('! - , *''P*(-2(E''')\#(:#-;4'*\&-,(\$, ;() ' - , 34\%6*\&-,(\&, (A - 4* + 5''3*''\#, () * +& -6\&\$)!Q/64"A:"+.567.!!64S'(!6(') ' *'3!4*!*0'!) HS' $\%\$8!.'))\%, \$!, -!*0'!DN*0!: $\$/42!W''*\%\$8!, -!*0'!., <*'*+!-,(!:; '(*<4\$!::(<04', 2, 8+!!W\2d4/a''(!X\%)<, $)\%5!]$
: S(%2!C>>F!!	$\begin{array}{l}9+"(N, \$.03\&3(-2(95-(N=\$,;-,";(G\&;"FB-\#W"\#(G-43"+;3(\&,(X-,3-D())*+\&-6\&\$)!Q/64"\\\mathbf{A}:"+.567.0!d\$^{0}]4(\$'**!R2\$-*0!\setminus '7'<<4!Z2'\$^{0}!4\$3!W\$\$4))\$'!B\$(;40!64S'(!6(')'\$'3!4*!)*0'!DN*0!:\$\$/42!W''*\!\$\$8!,-!*0'!.,<\!\$'*+!-,(!:;'(\$<4\$!:(<04',2,8+!W''*\!\$\$8!,-!*0'!.,<\!\$'*+!-,(!:;'(\$<4\$!:(<04',2,8+!W''*\!\$\$8!))*''$
W4(<0!C>>C!	9 + "(A - '&.(\$, ; ())' - , -%('(! - , ; &.(*A - , 3(-2(! "#\$%(*A - , 4')))))))))))))))))))))))))))))))))))
9,&5!C>>"!	! \$3*"3(&, (N2#&'\$c(N(A*4;0(-2(*+"(1\$%-(:"-6."(&,(3-4*+5"3*"#,())*+&-6&\$@!Q/64"A:"+.567.@!64S'(!S(')'\$*'3!4*!*0'!">>!"!: \$\$/42!W''*!!188!,-!*0'!: ; '(!!<4\$!: \$\$*0(,S,2,8)!<42!:)), 4*!!, \$!W''*!!188!:X4)0!!188!, \$\$!U''!!188!!X4)0!!188!, \$\$</td
: S(%2!C>>"!	$ = \frac{1}{2} = \frac$
W4(<0!"PPP!	$\begin{array}{l} 9-(G\$?''(\$,;(9-(G\$?''FR-*L(9+''())*+,-\$\#'+\$''/0(-2(1\$\%-(B''\$.*+(\$,;(!''\#\$\%\&'(^3''0!),0))))))))\\ 0/64''A:''+.567.0!64S'(!6(')'\$*'3!4*!*0'!D=!''!:\$\$/42!W''*\$\$\$!,-!*0'!,<\$'*+!-,(!::;'(\$<4\$!:(<04',2,8+0!R0\%<48,0!))))))\\ \end{array}$
W4+!"PPN!	$! "\# \$ \% "() *+, -\$ \# '+\$ " /0(\$ \% - , /(*+"(1 \$ \% - (: "-6. "3L(: - **" \# 0(: #-; 4 '* \& - , (\$, ; (! - , 34\% "# (^3" @!Q/64" A:"+.567. @!64S'(!S(') '\$*'3!4*!*0'!, <\\'*+!, -!: -(\<4\))*!: (<04', 2, 8\)*)!W' '*\\$8@!.+(4$

- ^/2+!C>"N! / &?&.&b";(/-,34%6*&-,0!W/)'/;!,-!1%\$'!:(*)0!.*5!6'*'()7/(80!12,(%340!Q/64"A:" +.567.0!d%*0!W%<04'2!G'\$\$'**!4\$3!A(4&%)!\/SS5!!
- ^/\$'!C>"N! / &?&.&b";(!-,34%6*&-,0!12+%\$8!G,4*!G('d'(+0!.*5!6'*'()7/(80!12,(%340!Q/64"A:"+.567.0! d%*0!^'\$\$%-'(!.'3%22,!4\$3!W%<04'2!G'\$\$'**5!!

^/\$'!C>"N!

- 9, &5!C>"F! $N\#'+\$"-.-/0(-2(E'''\#L(N()--W(2\#-\%())*+\&-6\&\$(\$,;(E''0-,;\emptyset!`\$\&\$*'3!S4S'(!S('))**'3!4*!*0'!X''3,\$!`)24\$3!R/2*/(42!R'$*'(!*,!*0'!R'$*(42!B/2-!R,4)*!:(<04',2,8\%<42!.,<*+0!Q/64"A:"+.567.5!!$
- $: S(5!C>"F! # $\%&'()\%+!, -!., /*0!12, (\%34!.*5!6'*'()7/(8!A, d$!4$3!B, d$!H(84$\%T4*\%, $5!) N#'+$''-.-/0(-2(E'''#($,;(1$\%-(>"3"$#'+(&,(3-4*+5"3*"#,())*+&-6&$\emptyset!Q/64"A:"+.567.0!] d\%*0!Z4*0(+$!:(*0/(5!!)) d\%*0!Z4*0(+$):(*0/(5!!)) d\%*0!Z*0!Z4*0(+$):(*0/(5!!)) d\%*0!Z*0!) d\%*0!Z*0!Z*0(+$)$
- $\begin{array}{l} H<*5!C>>=! & J\&?\&, /(5\&*+(:-**''\#0L(N,()*+,-$\#'+$''-.-/\&'$.(A*4;0($\%-,/(*+''(1$\%-(:''-6.''(-2(A-4*+5''')3*''#,()*+\&-6\&\$)!`$&&*'3!S4S'(!S(')'$*'3!4*!*0'!X''3,$!`)24$3!R/2*/(42!R'$*'(!*,!*0'!R'$*(42!B/2-!R,4)*!:(<04',2,8\%<42!.,<&'*+5!! \end{array}$

!

??#+?"+<="B*+*,"-%,B,<*+*&?<B"

- $\begin{array}{l} W4(<0!C>CF! \\ > P'\$?\$^{-}, 3(\$^{+}''B'''; '', (C3.\$, ;(Ad*''0!6(')'\$'3!\$\$!0'!-\$'23!4)!S4(*!, -!: (<04', 2, 8+!) \\ :<43'; +!0!12, (\$34!: (<04', 2, 8+!W, \$*0!4*!*0'!X''3, \$!`)24\$3!R/2*/(42!R'\$*'(!LQ/64'') \\ A:''+.567.0!d\$*0!Q2\$T47'*0!., /*04(3!4\$3!J(5!), 7'(*!: /)*\$\$M5! \end{array}$
- $$\begin{split} & \mathsf{W4}(<\!0!\!C\!>"\mathsf{P}! \quad)P'\$?\$^*\mathfrak{d}_{-}, 3(\$^*(+"(B"";",(C3.\$,;(A\mathfrak{d}^*"\emptyset!6(')`\$^*'3!\$\$!*0'!-\$'23!4)!\mathsf{S4}(*!,-!:(<\!04',2,8+!); \\ & :<\!43';+!0!12,(\$34!:(<\!04',2,8+!\mathsf{W},\$*0!4*!*0'!X''3,\$!`)24\$3!\mathsf{R}/2*/(42!\mathsf{R}'\$''(!LQ/64"; \\ & \mathbf{A}:"+.567.\emptyset!\,\mathsf{d}\,\$*0!\mathsf{Q}2\%\mathsf{T47}'*0!.,/*04(3!4\$3!Z'\$342!^4<\!a),\$\$5" \end{split}$$
- W4+!C>"N! $9+"0(R"?"#(J"2*L(8 \& 0(J\& 2"(-2(\&(A \& 2"*0(G \& #=-#(A"**."%", *(\& *(*+"(B""; ", (C3.\&, ;(A\& *"(BI:CJKD(7.-#\&; \& !LQ/64"A:"+.567.0!QWT47'*0!., /*04(3! \ 4TT, /a0!] ' 4*0'(! J (4)a, \& <00!)]$

C>"F0C>"=! !	$K = \frac{10004}{(!-,(!*0'!\#\$\%`()))} + \frac{1}{(!+1)}, \frac{1000}{(!+1)}, \frac{1000}{(!+1$							
C>"F!*,!C>"b! !	$< \frac{1}{2} + $							
	#\$%&'()%*+!,-!.,/*0!12,(%34!.*5!6'*'()7/(8!R,22'8'!,-!:(*)!4\$3!.<%'\$<')!14 2*+!<br R,/\$<%25!!							
C>>P! !	$6) + < 0, 2, 8 + !A' $/('!4$3!6(, ; , * $!R, ; ; **''!; '; 7'(5!!)$							
C>""!*,!C>"C! !	R,22'8'!,-!:(*)!4\$3!.<\'\$<')!A'\$/('!4\$3!6(, ; ,*\$!R, ; ; **''5!!							
C>""!*,!C>"C! !	R,22'8'!,-!: (*)!4\$3!.<%'\$<')!A'\$/('!4\$3!6(,;,*%,\$!A4)a!1,(<'!-,(!*0'!R,22'8'!,-!							
	: (*)!4\$3!.<\'\$<')!14 2*+!R,/\$<\25!!</td							
!								
=, -+%* (, $<*"#?$ ((&**, , B")								
C>CF!I!C>Cb! !	# . 1! J 'S4(*; ' $*!$, -!: $*0(, S, 2, 8+!14 < /2*+!: 3\&), (+!R, ;; **' '5!!)$							
C>C>!I!C>CC! !	#.1!J'S4(*; '\$*!,-!:\$*0(,S,2,8+!14 2*+!:3&%),(+!R,;; %**''5!</td							
C>C>!I!6(')'\$*!	#.1!.*5!6'*'()7/(80!14 2*+!:3&%),(0!.*/3'\$*!:\$*0(,S,2,8+!R2/75!!</td							
C>C>! !	$\mathbf{R}_{,;;} = \frac{1}{2} \left[\frac{1}{2} \left[\frac{1}{2} \right] + \frac{1}{2} \left[\frac{1}{2} \left[\frac{1}{2} \left[\frac{1}{2} \right] + \frac{1}{2} \left[\frac{1}{2} \left[$							
	6(,8(4;!\\$!*0'!J'S4(*;'\$*!,-!.,<\'*+0!R/2*/('0!4\$3!E4\$8/48'5!!							
C>">!*, !C>C>! !	$R04\%(!, -!*0'!J'S4(*; '\$*!, -!., <\%'*+0!R/2*/('0!4\$3!E4\$8/48'!A(4\&'20!\setminus')'4(<00!4\$3!E4\$8/48')$							
	6(,-'))%, \$42! J '&'2, S ; '\$*!R, ; ; %**' '5!!							
C>"b!*,!C>"P! !	: \$*0(, S, 2, 8+!6(, 8(4; !R,, (3\state), (!							
C>"N! !	R04%(!,-!J'S4(*; '\$*!W%30A'\$/('!R,; ; %**''!-,(!J(5!G+(,\$!W%22'(5!!							
1422!C>"F! !	`\$*'(%; !R04%(!-,(!*0'!J'S4(*; '\$*!,-!.,<%'*+0!R/2*/('0!4\$3!E4\$8/48'5!#\$%&'()%*+!,-!							
	.,/*0!12,(%34!.*5!6'*'()7/(85!!							
!								

C>>=!*,!C>>b!	G,4(3!W'	:7'(!I!R'\$*($42!\mathbf{B}/2-!\mathbf{R}$	4)*! :	(<04'	2.8+!	. <% '*+5!
, , , , , , , , , , , , , , , , , , , ,	\circ, \circ, \circ	, , 、	ψ		, . ,		, _ , 🖸 !	9

 $C >>= !*, !C >> D! \qquad G, 4(3!W'; 7'(!I!., <\$'*+!, -!: -(\$<4\$))*!: (<04', 2, 8\$)*)5!$

!

#? ((\$ < & * Z B, %) & #, "

 $C>"D!*,!6(')'$*! 6(')*3'*!-,(!*0'!:22\%4$<'!-,(!X''3,$!`)24$3!:(<04',2,8\%<42!\')'4(<0!4$3! 03/<4*\%,$0!`$<5!L:X`:\QM5!$

 $C >> N!^*, !C > "F! : 3 \& \%, (+!G, 4(3!W'; 7'(!-, (!*0'!: 22\%4\$<'!-, (!X''3, \$!`)24\$3!: (<04', 2, 8\%<42!)$ (<04', 2, 8%<42!) $(')'4(<0!4\$3!Q3/<4*\%, \$!L: X`: \QM5!$

!

-,,%''%,)&,A''?E''+%*%#',B%''@??RB%''+<="C%+<*B'''

- C>CF! ! 0-4#, \$.(-2(N#'+\$''-.-/0(-2(7--;(\$,;(7--;5\$03)
- C>CF! ! 0-4#, \$.(-2(N2#&'\$, (N#'+\$''-.-/&'\$.(>''?&''5(
- C>CF! ! 9+''(7.-#&;\$(1''-/#\$6+''#!)
- C>CC! ! 0-4#, \$.(-2(N2#&'\$, (N#'+\$''-.-/&'\$.(>''?&''5!)
- C>CC! ! 0-4#, \$.(-2(N#'+\$''-.-/0(-2(7--;(\$,;(7--;5\$03!
- C>CC! ! 0-4#, \$.(-2(N#'+\$''-.-/&'\$.(A'&'', ''L(>"6-#*3)!))
- C>C''! ! 0-4#, \$.(-2(N, *+#-6-..-/&' \$.(N#'+\$''-..-/0(

C>C"

- C>""! ! 0-4#, (-2(N#'+\$''-.-/&'\$.(<''*+-;(\$,;(9+''-#O(LC!('&`'d)))!))))
- C>""! ! 94*%, \$42!B', 8(4S0%<!., <% '*+!B(4\$*)!
- C>""! ! .,<\\42!.<\\'\\$<')!\\')'4(<0!R,/\$<\\2!,-!R4\\4345!
- C>""! ! N2#&'\$, (N#'+\$''-.-/&'\$.(>"?&''5(0-4#, \$.(
- C>">! ! N2#&'\$, (N#'+\$''-.-/&'\$.(>''?&''5(0-4#,\$.(
- C>>P((N2#&'\$, (N#'+\$''-.-/&'\$.(>''?&''5(0-4#, \$.(
- C>>P! ! 0-4#, (-2(N#'+\$''-.-/&'\$.) < (-2(N#'+\$''-..-/&')))
- C>>N! ! 0-4#, \$.(-2(N#'+\$"-.-/&'\$.(A'&", '"!
- C>>N! ! Nb\$, &\$(
- C >>=! ! # \$% () % +!, -!: (% T, \$4!6('))!