!
'' #\$!%&'()*!+,&/!0122.(())!
%))(/!#/)-3&!
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''#\$&`()*!+,%.!/*!01213!4!5!22!(676!
8#(9:;<%=&!8<9>;%;9:;!?<<73!@-A9;%&=!
B(!?<<7!CC1!
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! 2D!!!!!E;.:<7;!(9'!F96%<'\$:G-<9&! OD!!!!!H;I!8(7,\$&!J(&G;%K.(9L!!!?-:#!M<<9;!N! O;P!B<%9;%! CD!!!!!Q(:-.-G-;&!@;%R-:;&!S,'(G;! TD!!!!! ''#; !9; I !8J K*!G#%<\$A#I-9G; A%(G-9A!%; &; (%: #!(9' !G; (: #-9A*!I -..!: (, -G(.-b; !<9!G#; !
#-A#!9\$7P; %<>1%; &; (%: #!' <...(%&!, ; %&G\$' ; 966!
!
8#\$: Y!&\$AA; &G; ' !-9:.\$' -9A!&<7; !, #<G<&!&#<I -9A!'; >-:-; 9G!. (P&!a-9!(' ' -G-<9!G<!
, #<G<&!I -G#!A<<' !. (P&D6!
!
M-..!&\$AA; &G; ' II ; !:<\$.' !&#<I !G#; !%; &; (%: #!%; G\$%9!>%<7!9; I !P\$-.' -9A&6!?-: #!
&\$AA; &G; ' !G# (G!E ??M!: (9!P; !(9!;] (7, .; 6!
!
@G; R; !J \$%, #)!&\$AA; &G; ' !G# (G!G#; !, (%G9; %&#-, &!(9' !<\$G%; (: #!; .; 7; 9G&!(%; !.-A#G6!
C7, # (&-b; !G# (G!S+0!-&!(GG%(: G-9A!#-A#!: (.-P; %!-9&G-G\$G-<9&!a; 6A6*!F+?8*!88B?8D6!
O; &: %P; !I # (G!F+?8!(9' !88B?8!#(R; !P%<\$A#6!G<!: (7, \$&6!''#-9Y!7<%; !: <9:%; G; .)!
(P<\$G!, <&&-P.; !\$&; &!<>!G#; !, .(99; '!, (%G9; %&#-, !(%; (&6!H; ; ' !G<!-9:.\$' ; !>-A\$%; !
9\$7P; %&!><%(..!9(7; '!>-A\$%; &6!` \$Y<9!O%R; !9; ; ' &!G<!P; !. (P; .; '!<9!(..!7(, &3!G#; %; !
(%; !7(9)!%; >; %; 9:; &!G<!-66!</pre>

 $O{<}A!\&\\AA; \&G; '!.(P; .-9A!\&{<}7; !; .; 7; 9G\&!{<}9!G\#; !7(, \&!a; 6A6*!\&G\%; ; G!9(7; \&b6! !)]$

@:<GG!(&Y; '!(P<\$G!, .(9&!G<!, %; &; 9G!G#; !%; R-&-<9!G<!G#; !A%; (G; %!: (7, \$&6!O; P!

\<9(G#(9!, (&&; '!<\$G!(!7(, !I -G#!Q(:-.-G)!@; %R-:; &=!, .(99; '!:<9&G%\$:G-<9!, %<d; :G&! ><%G#;!O121!:<9&G%\$:G-<9!&; (&<96!

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 $\begin{array}{l} \mathsf{F}(9!(\&Y; '!(P < \$G!G\#; !, <\&\& -P - . - G)! <>!('' - 9A!(!P - Y; !, (G\#! - 9!: < 99; : G < 9!| - G\#!G\#; !\&; |; %! . -9; !, %<d; : G6! < 9(G\#(9!\%; , . -; '!G\#(G!G\#; !P - Y; !, (G\#!| < \$.'!\%; ^$-\%; !>\$9' - 9A!>\%< 7!(!' ->>; \%; 9G!\&<\$\%; ;!(9'!G\#(G!>\$9' - 9A!-&!9 < G!(R(-.(P.; 6!)))) \\ \end{array}$

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$$\begin{split} & F(9!(\&Y; `!->!G\#; \%; !-\&!(9)!K?!(P<\$6!G\#; !:<9\&G\%\$: G-<9!<>!G\#; !; 9; \%A)!; >>-:-; 9G!P\$-.'-9A! \\ & (G!Q<\%G!`\$Y<96! < 9(G\#(9!P; .-; R; \&!G\#(G!88?8!I-..!.-Y; .)!, \%<7<G; !G\#; !K?!><\&!G\#; ! \\ & , \%<d; : G6! \end{split}$$

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O-(99;!(&Y; '!->!, %<R-'-9A!+O+!(::; &&!G<!G#;!, (G-<!(G!G#; !8#(9:; ..<%=&!#<\$&; !-&!<9! G#;!, %<d; :G!.-&G6!\<9(G#(9!(9'!H-:<.; !I -..!>-9'!<\$G6!

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<7A5122.(())!B): 1*(0!81*(@!0&2:7'!

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 $@<7; !H8!\&-A9\&!1 - ...!#(R; !G<!P; !\%; e' <9; _\%; R-\&; '!P; : ($\&; !U$Y; !B<, Y-9\&!-\&!G#; !$

9(7;'!H8!:<9G(:G6!

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 $\begin{array}{l} J \left(-96; 9\left(9:; !, <\% - <9! <>! G\#; !+\% 7 \right) !8 <\%, &!: <96\% (: G!1 \ (\&!9 < G!: <7, .; 6; '6!''\#; !\&\&; !\\ , <\% - <9! <>! G\#; !, ; \% 7 - G!\# ('!P; ;9! \&\& P 7 - GG; '6! H-: <.; !#(\&!(\&Y; '!G\#; !+\% 7)! 8 <\%, \&! ><\% !\\ \left(9!;]6; 9\& - <96! FG! \&; ;7\&!(9!;]6; 9\& - <9! I \ -..!P; !A\% (96; '6! \\ \end{array} \right)$

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O; P!(99<\$9:; '!><%7(G-<9!<>!9; I!8#(9:;..<%-&!('R-&8#)%(\$)4(,)4&!<9!9(7-9)