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#\$%&!'(')*!+)&,*%-)&!\$. /!\$0')*1)21!\$(&!,\$(34)+!\$. /!)!*)(+!(3+!\$. /!%!\$(&!\as67)3,)+!1\$)!6)(*3\ask1.5!*)(+\ask848!
9(&)+!.3!(!,.:'(*\ask1.3!-)1/))3!1\$)!: (\ask81.5)(17*)&!.5!\$0')*1)21!(3+!1\$.&)!.5!**\ask91.5!**\ask1.21;<!-\ask81.5!*\ask1.21;<!-\ask91.5!\ask1.21;<!-\ask81.5!\ask1.21;<!-\ask91.5!\ask1.21;<!-\ask91.5!\ask1.21;<!-\ask91.5!\ask1.21;<!-\ask91.5!\ask1.21;<!-\ask91.5!\ask91.5!\ask1.21;<!-\ask91.5!\ask91.

?&! 3) /! 1), \$3.6.4%&!):)*4);!, .: '71)*&! \$(=)!-),.:)!%3+%\')3&(-6)!1..6&!%3!.7*!+(%e 60!6%5)&! A). '6)! &) (*, \$!5.*!%5.*: (1% 3! (3+!, .: 73% (1)!/%\$!.1\$)*!'). '6)!.3!1\$)!<3@1)*3)18! B.: '71)*&! (*)! (6&.!7&)+! (1! &, \$..6! (3+!%3,.*'.*(1)+!%31.!1\$)!, 7**%, 767: &! <3! CDEFCGE!, 6(&&)&;!,..: '71)*&!&)*=)! (&!1..6&!5.*!6(347(4)!6) (*3)*&! D%3,)!: (30!&17+)31&!*) (+!(3+!/*%)!1)21&!.36%3)!5.*!'6) (&7*)!.*! (&!'(*1!.5!1\$))%!')*&.3(6!6%=)&;! (,1%=%%)&!/\$%\$!(*)!%31)4*(1)+!/%\$!1\$)!<31)*3)1!.*!,.: '71)*!&.51/(*)!: %4\$1!)3\$(3,)!&17+)31&!:.1%=(1% 3! (3+F.*!+)=)6.':)31!.5! 1\$)%!6%)*(,0!&>%6&!HI,J--;!KLLM;!'8!NM08!

.5!(!'(4)!1.!1\$)!-.11.: !*\(4\)1!,.\(^3\)*!\(\#\)34;!\(KLL_(!\W!\)KLL_-0\)!\(.).\(^1\).\(^1\)!\(^1\).\(^1\)!\(^1\)!\(^4\)\(\%!\).\(^1\)!\(\%!\)!\(^1\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)!\(\%!\)

4"51'-%7!D(: '6)!.5!'*%31)+!1)21!HD\$(>)&')(*);!+,*-,%./%012"-3;!1\$)!-)4%3%34!.5!(,1![;!&,)3)![0!]



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4"51'-%87!D(: '6)!.5!\$0')*1)21!HD\$(>)&')(*);!+, *-, %\$./%012"-39:1\$)!-)4%3%34!

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>3. /6)+4)!	: (1% 3!*)6(1%34!1. !1\$)!1. ' %!	
I . 3%. *!(3+!*)@	g)(+)*!(+]7&1!*)(+%4!*(1)!+)')3+%4!	D>%: %34!(3+!&,(33%34!-)@
' (%!, . : '*)\$)3@	. 3!1\$)!' 7*' . &)!. 5!*)(+%34!	,.:)&!,*7,%(6!5.*!*)(+%34!&\$))*!
&% 3!		=. 67:)!. 5!1)21!
S)1)*: %3)!% '.*@	g)(+)*!(3(60^)&!1)21!1.!+)1)*: %)!	D% %(*!&1*(1)4%)&!7&)+!
1(31!%+)(&!	/\$%\\$!'\(^1&!\(^*)!\%\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
	%34!(3!73+)*&1(3+%34!. 5!1)21!	
D031\$)&%)!	g)(+)*!&%1&!% '.*1(31!5*.: !73% '.*@	D% %(*!&1*(1)4%)&!7&)+!
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	(3!\()(!	
S*(/!%35)*)3,)&!	g)(+)*!*)(+&!-)1/))3!1\$)!6%)&;!7&%4!	D% %(*!&1*(1)4%)&!7&)+!
	-(,>4*.73+!>3./6)+4)!(3+!1)21!1.!	
	\$)6' !5%6!%3!1\$)!4(' &!	
?&>!T7)&1% 3&!	h7)&1% 3&!4%)!' 7*' . &)!1. !*)(+%34!-0!	f 7%+%34!T7)&1% 3!: 7&1!-)!%3!
,	: . 3%. *%34!1\$)!*)(+)*!1. !, . 31%37)!	5. *)5*. 31!. 5!*)(+)* &!: %3+!. *!
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		6%)60!
J (=%4(1)!	g)(+)*!7&)&!1\$)!5)(17*)&!.5!' *%31!1)21!	g)(+)*!5%47*)&!. 71!5)(17*)&!. 5!
,	1. [8] (*, \$!5. *!%5. *: (1% 3!H)848!1(-6)!. 5!	1\$)!<31)*3)1!%3!. *+)*!1. !&)(*,\$!
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&\$.76+!-)!): '\$(&%')+!/\$)3!&17+)31&!*)(+!\$0')*1)21&!<3!1\$%!&17+0;!&17+)31&!*)(+!1\$)!
1)21!-0!&)11%34!4.(6&!5.*!&>%: %34!(3+!&)(*,\$%34!H&,(33%340;!:3%1.*%34!1\$)%!73@+)*&1(3+%34!(3+!&)(*,\$%34;!(3+F.*!*)=%%34!1\$)%!&1*(1)40!7&)&!?&!D,\$: (*@\$.-6)*!HKLL"0!

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1)21! &.! 1\$(1! 1\$)0! *)(6%)! /\$(1! 1\$)! 7&)576! 573,1% 3&! . 5! \$0')*1)21! (*)! (3+! /\$(1! ,\$(6e) $(6)34)&!^*)(+)^*&!5(,)8!<3!,6(&&;!1)(,$)^*&!,(3!-)!$: . +)6&! 5. *! 1\$)%! &17+)31&! HB. \(\% \). ;! KLL"Q! I , J (--;! KLLM;! '8! N_0! (3+!)2'6(%3! \$. /!1.! &) (*, \$!5. *!%5. *: (1% 3!7&%34!/)-!-*. /&)*&! (3+!>)0/.*+&;!../!1.!*)(+!...*)*1)21!78%34!1\$%3>!(6.7+!'*.1.,.6&!1.!%67&1*(1)!/\$(1!1\$)0! :)(38!?1!1\$%!&1(4);!1)(,\$)*&!: %4\$1!/(31!1.! 5., 7&! . 3! &. :)! 7&) 576! *) (+%34! &1*(1) 4%) &;! &7,\$!(&!,.43%\%=);!:)1(@,.43%\%=);!(3+!3(=\% 4(1% 3(6! &1*(1) 4% &! %3! . *+)*! 5. *! &17+) 31&! 1. ! &7,,)&&57660! %31)*(,1! /%\$! \$0')*1)21! HI , J (: (*(!W!D\$('%.;!KLLY;!'8![[08!#)(,\$@)*&!: %4\$1!5))6!1\$(1!1\$)0!(*)!&')3+%34!: 7,\$! 1%)!. 3!1\$)&)!)2'6(3(1% 3&!(3+!%3&1*7,1% 3&;! 0)1!%!%!)&&)31%(6!5. *!&17+)31&!1. !73+)*&1(3+! \$. /!1. !: (3(4)!1\$)!573,1% 3&!. 5!,..: '71)*&;! $7\&)!1\$)!{<}31)*3)1;!(3{+}!*)({+}!\$0')*1)21!(''*.@$ ' *%(1)608! **\\$%**)!&17+)31&!(*)!/. *>%34!. 3!1\$)%! 1(&>&!7&%34!, .: '71)*&;!1)(,\$)*&!,(3!-)!5(,%e6% (1. *&8! #\$)0! . -&)*=)! (3+! : . 3%1. *! 1\$)%! !/. *>:!(3+!/\$)3)=)*!&17+)31&!\$(=)!1*. 7-6)&;!1)(,\$)*&!,(3!\$)6'!1\$): 8! ?3.1\$)*!% '.*1(31!*.6)!.5!1)(,\$)*&!**%**! 1. !&)6), 1! (' ' *. ' *%(1)!/) -&%)&!5. *!1\$)%!&17@ +)31&! $H9^*(3+6;! \text{ KLLK08! } \vee \$)3)=)^*! 1)(,$

%+)(&!%3!1\$)%!./3!/.*+&8!?,,.*+%3460;!%!%!
%'.*1(31!5.*!1)(,\$)*&!1.!,(*)57660!,*)(1)!
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