E : J 1, 2022

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 $\frac{F', \$\&(4)+6; /+\&)\#+()&F', 7/'\#'(\&)'''(V''); (\&5+<+'."'<.+'1.\%'''7(\&6<(1(\%+'(*\%''(\&"+\%2"))), + I9), "7(\&'(\%)(\%'')5<.9.<.\%6./"*<"7.'<(1.\%''')*"+\%''(\%7(B(7)), "+\&*6*15+<.7"'*"*'?.<\&''?+''(\&"N+\&.7"*\%'') + (\%7(B(7)), "***'?.<\&''?+''(\&"N+\&.7"*\%'') + (\%7(B(7)), "***'?.<\&''?+''(\&'')+\&.7"*'') + (\%7(B(7)), "***'?..., "*$

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 $\begin{aligned} O+<+\&\&1 . \%'''N+\&.7''*\%''\&.4/''\&.4)+, "*<(.\%'+'(*\%/''@.\%7.<"(7.\%'('2/''*<"@.\%7.<".45<.\&\&(*\%/'' I ?(6?'' 1+2''))) \\ (\%6,)7."+6'\&"*9''+@@<.\&\&(*\%/'' (\%'(1 (7+'(*\%/''*<" ?*\&'(,('2/'' I ?.'?.<"B.<N+,/'' 5?2&(6+,/'' @<+5?(6/'' *<"')))) \\ *'?.<I(\&.a">*"X)+,(92"+&"^.\%7.<:Z+\&.7"O+<+\&&1 . \%'/'''?."6*\%7)6'''\%..7"\%*''(\%B*,B."6*\%7)6'''*9"+'' \\ \&.4)+, "\%+')<.a"^.\%7.<:N+\&.7"?+<+\&\&1 . \%'''6+\%''+Y."'I*"5<(1+<2"9*<1\&V'') \\ \end{aligned}$

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C*1 + %'(6"*<"&.4) +, "<., +'(*%&?(5&" I ?.<."'?.<."(&"+"7(99.<.%'(+,"(%"5*I.<"*<"+)'?*<('2"5<*7)6."<(&Y&"9*<".B.<2"1.1N.<"*9"*)<"6*11)%('2"+%7")%7.<1(%."'?."5<*9.&&(*%+,(&1"*9"9+6),'2"+%7"&)5.<B(&*<&a"5,..., a.5,..., a.5,.., a.5,..

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<u>8.39": "#%7&; %\$,#"31/9"</&</u>

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 $\begin{array}{l} \stackrel{:}{>}?."0^*,..@."I(,,"'+Y."(1 1.7(+'."+\%7"<.\&5*\%\&(B."+6'(*\%"'*"+\%2"<.5*<'"*9"<.'+,(+'(*\%"+\%7" I(,,"5)<\&).") \\ 7(\&6(5,(\%+<2"+6'(*\%"+\&"+55<*5<(+'.a" H\%" (\%7(B(7)+,"<.5*<'(\%@" G<*?(N('.7" 0*\%7)6'" (\&" .\%'(',.7" '*")<5<*'.6'(*\%"9<*.1"+\%2"9*<.1"*9"<.'+,(+'(*\%"9*,,* I (\%@"+"<.5*<'"'?+'"(\&" 1+7."(\%"@**7"9+('?/" .B.\"(9"'?.")) \\ \end{array})$

+,,.@+'(*%&"*9"G<*?(N('.7"0*%7)6'a"

 $\begin{array}{l} C. '+, (+'(*\%' (\%6,) 7. \&" +7B. <\&." +6'(*\%' '+Y. \%" +@+(\%\&'" +" 5. <\&*\%' 9*<" 1 +Y(\%@" +" @**7" 9+('?" <. 5*<'" *9" G<*?(N('.7" 0*\%7) 6'"*<"5+<'(6(5+'(\%@"(\%" +\%2" 5<*6..7(\%@") \%7. <"'?(\&"G*,(62a" H7B. <\&." +6'(*\%"(\%6,) 7. \&" 6*\%7) 6'" '?+'" '?<.+'. &\&/" 6*. <6. &//" *<"'?+'" \&... Y&" '*" 7(\&6*) <+@." +" <. +&*\%+N, ." 5. <&*\%" 9<* 1 ". &@+@(\%@"(\%" +6'(B('2" 5<*'.6'.7") \%7. <"'?(\&"G*,(62a" C. '+,(+'(*\%" 6+\%" N. "6* 1 1 (''.7" N2" *<" +@+(%\&'" +%2" (\%7(B(7) +, *<"@<*) 5"*9"(\%7(B(7) +, &/" %*'") b) \&'" +" 0* 15, +(\%+\%" *<" C. &5*\%7. &'a" C. '+,(+'(*\%" 7*. &%*'") *'"(\%6,) 7. "@**7" 9+('?" +6'(*%\&", + I 9),, 2" 5) <&). 7"(\%'<. &5*%&. "'*" +<.5*<'"*9" G<*?(N('.7" 0*\%7) 6'a" C. '+,(+'(*\%" 1+2" N. "5<. &. &''' .8. "'') ... *(" +9(\%7(\% 0* 9"_) *"<. &5*%&(N(,('2`" I ('?" <. &5. 6'" *")?.")))))))$

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 $\underbrace{:5'-6...''6:5''6@\&/\&, \#+()}{"j}(7"5<*"X)*"?+<+\&\&1..\%'"*66)<\&"I?..\%"\&N1(\&\&(*\%"'*"*<"(.b.6'(*\%"*9"))%I..6*1."6*%7)6''(\&')&.7/".45,(6(.2"*<"(15,(6(.2"+\&"?."N+\&(\&"9*<"7.6(\&(*\%\&"+99.6'(\%@"+\%"'(%7(B(7)+,A\&".7)6+'(*\%"').a@a/"+71(\&\&(*\%/"+6+7.1(6"\&'+\%7(\%@/"@<+7.\&/"+&\&(@%1..\%']i".15,*21..\%'').a@a/"?(<(%@/"+7B+%6.1..\%'/"+&&(@%1..\%']i"*<"5+<'(6(5+'(*\%"(\%"+")...)))$

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! 'A'%6 * '8N), 6V6; ')%+6<=6399'7+6

 $\begin{array}{l} O+\%7, .\ \&"6*\ 1\ 5, +(\%'\&"*9"G<*?(N('\ .\ 7"O\ *\%7)\ 6''+@+(\%\&'"+\%2"(\%7(B(7)+,i"\ I\ *<Y\&"\ I\ ('?"*'\ ?\ .<"*99(6\ .\&"\ *\%:6+\ 1\ 5\)\&"\ +\&"\ +55<*5<(+'\ .\ "\ '*"\ 5<*B(7\ .\ "\&)\ 55*<'(B\ .\ "(\%'\ .<(1\ "\ 1\ .\ +\&)<.\&/"\ I\ ?(6?"\ 1\ +2"\ (\%6,)\ 7\ .\ "&:6?+\%@\ .\&"(\%''?*)\&(\%@'''+6+\ 7\ .\ 1\ (6"9,\ .\ 4(N(,('2/"+\%7"\%*:6*\%'+6"\ 7(<.6'(B\ .\&''+1\ *\%@"*'\ ?\ .<"\ 1\ .\ +\&)<.\&a""$

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Q&%, +6*+\$''/), 6

>?."0*, ..@."+Y.&"?."+66)<+62"*9"(%9*<1+'(*%"B.<2"&.<(*)&,2/"+&"+"<.5*<'"*9"G<*?(N('.7"0*%7)6'" 1+2"?+B."&.B.<."6*%&.X).%6.&"H"@**7:9+('?"6*15,+(%'"'?+'"<.&),'&"(%"+"9(%7(%@"*9"%*'"<.&5*%&(N,."(&"%*'"6*%&(7.<.7"+"9+,&."*<"9+N<(6+'.7"<.5*<'"*9"G<*?(N('.7"0*%7)6'a"3+6?"5+<'2"+%7".B.<2"I('%.&&"(&"*45.6'.7"'*"5<*B(7."'<)?9),"(%9*<1+'(*%"'*"'?."\$%B.&'(@+'*</"O.+<(%@"U99(6.</"+%7"H55.+,&"U99(6.</"*5<*B(7."'<)?9),"(%9*<1+'(*%"*9"O*,..@."5*,(6(.&"+%7"I(.,"N."<.9.<<.7"'*"'?."+55<*5<(+'."*99(6."')?)?)?("9)</th>

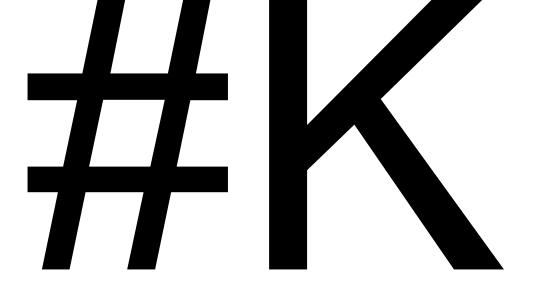
*+\$"/),6<(A"%A'(86R'("/,6"/6>5,\$+7)+-6!N%-6EC5,+6

f \$9"'?.<."(&"%*"(11.7(+'."7+%@.</"6*%'+6'"'?."0?(,7"G<*'.6'(*%"O*',(%."#="?*)<&"+"7+2/"M"7+2&" +"I..Y/"+'"\PRR]"F=R:=RRRa"\$9"6+,,(%@"9<*1"*)'&(7."*9"0+,(9*<%(+/"6+,,"\#!S]"KS[:"=FRRa"

$$\begin{split} &H\%2"U66(7.\%'+,".15,*2.."I?*"(\&"+,\&*"+"6*\%9(7.\%'(+,".15,*2.."\setminus9*<".4+15,./"+"'?.<+5(\&'/"\&.4)+,"\\ &+\&+), "B(6'(1"+7B*6+'./"5?2\&(6(+\&]"+\%7"I?*"I+\&"?(<.7"(\%'*"'?+'"6*\%9(7.\%'(+,"<*,."\&?*),7"<.5*<""\&)\&5.6'.7"6?(,7"+N)\&."*<"\%.@,.6'"'*",+I".\%9*<6.1.\%'"+\%7g*<"'?."m*\&"H\%@...&"0*)\%'2";.5+<'1.\%'" *9"0?(,7"+\%7"L+1(,2"J.<B(6.\&"N)'"I*),7"\%*'"1+Y."+\%2"\&)6?"<.5*<'"'*"'?."O(B(,"C(@?'\&"D">(',."$E" O**<7(\%+'*<"*<'''?.";."(<.6'*<"*9"O+15)&"J+9.'2a") .4*''$$

M R

$$\begin{split} & \texttt{W5\%''<.6.(5''*9''+"<.5*<'/"'?."0*,,.@."I(,,"5<*B(7."<.+&*\%+N,."+\%7"+55<*5<(+'."&)55*<'(B."1.+&)<.&" \\ & 7.&(@\%.7"'*"5<.&.<B.".X)+,"+66.&&"'*"'?."0*,,.@.A&"5<*@<+1&"+\%7"+6'(B('(.&/"+\%7"'*"5<*'.6'''?."5+<'(.&("(\%B*,B.7a">?."0*,,.@."I(,,"1+Y."<.+&*\%+N,.".99*<'&"'*"6*11))%(6+'."I('?"'?."5+<'(.&("'*".%&)<."'?+'"+,,"&+9.'2/".1*'(*\%+,"+\%7"5?2&(6+,"I.,,:N.(%@"6*\%6.<%&"+<."N.(%@"+77<.&&.7a"J)55*<'(B."1.+&)<.&" \\ & 1.+&)<.&"1+2"N."(15*&.7"<.@+<7,.&&"*9"I?.'?."9*<1+,"7(&6(5,(\%+<2"+6'(*\%"(&"&*)@?"'N2"'?."))) \\ \end{split}$$



 $\underline{B,.\%\&,17\&)} + <\!\!<\!\!3.\#\&;\%/3 + .6\%/\&\!\!>\!\!3.\&B30\!<\!\!\$,"1,1\#/\&,17\&;\%/\!<\!\!317\%1\#/\&$

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B31>"7%1#",\$& 5 %7"6,\$&; %/3+.6%/&

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 $>+4("B*)6?.<&"+<."+B+(,+N,."+'"G<*b.6'"JHL3/"0+15)&"J+9.'2/"311*%&"J')7.%'"c.,%&&"0.%'.<"+%7"C.&(7.%'(+,"37)6+'(*%"+%7"O*)&(%@"J.<B(6.&"'*"5<*B(7."9<..."'<+&&5*<'+'(*%"'*",*6+,"1.7(6+,"6.%'.<&a">?."J)<B(B*<"H7B*6+'."(&"+,&*"+B+(,+N,."'*"+66*15+%2"&)<B(B*<&"'*"+66.&&***9:6+15)&"<.&**)<6.&a">?."9*,,*I(%@"'?<..."*99:6+15)&"1.7(6+,"6.%'.<&"+<."+,,"7.&(@%+'.7"N2"m*&"H%@.,.&"O*)%'2"+&"J.4)+,"H&&+),'"C.&5*%&.">+1"_JHC>`]"O.%'.<&a" c?(,."'?."&5.6(9(6"5<*6.&&"+%7"<.&*)<6.&".+6?"JHC>"O.%'.<"*99.<&"1+2"B+<2/"@.%.<+,,2".+6?"JHC>"O.%'.<"I(,,"5<*B(7."+%"(11.7(+'./"B(6'(1:6.%'.<.7"<.&5*%&."9*,,*I(%@"+%"(%6(7.%'"*9"&.4)+,"+&&+),'/"(%6,)7(%@"6*,,+N*<+'(%@"N.'I..%"'?."?*&5('+,/",+I".%9*<6.1.%'"+@.%6(.&/"+%7"&.4)+,"+&&+),'"6*)%&.,*<&"*"=5<*B(7."6*15<.?.%&(B."'<.+'1.%"*5'(*%&a"$

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m*&"H%@.,.&/"O+,(9*<%(+"[RRSS"" \\$#\$]"##K:S[K!"

 $\frac{*\&\$+6; /+\&) \#+()6! +() + /6\&)6>\&()\&6R''('7\&4W!SE6R + - '7\&\%6! + () + /6\&)6>\&()\&6R''('6B'' + () + /6\&)6>\&()\&6R''('6B'' + () + /6\&)6>\&()\&6R'''('7\&4W!SE6R + - '7\&\%6! + () + /6\&)6>\&()$

 $\begin{array}{l} G<*B(7.\&"6*15<.?.\&(B./"9<..."<.+'1.\%""9*<"\&.4)+,"+\&&+),""\&)<B(B*<\&/"(\%6,)7(\%@"\#=:"?*)<" \\ .1.<@.\%62" 1.7(6+,"6+<."+\%7" 9*<.\&(6".4+1\&"5.<9*<1.7" N2" J.4)+,"H\&&+),"" 8)<\&." \\ 34+1(\%.<\&/"6*)\&.,(\%@"+\%7"5\&26?*'?.<+52/"+7B*6+62/"+\%7"+66*15+\%(1.\%"\&.<B(6.\&a"m*\&"H\%@.,.\&"0*)\%'2"7.\&(@\%+'.7"JHC>" \\ \end{array}$

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- f +77<.&&"(1 1 .7(+'."5?2&(6+,"&+9.'2"+%7".1*'(*%+,"I .,,:N.(%@i""
- f 6*11)%(6+'."%.6.&&+<2"7.'+(,&"*9"'?."<.5*<'"'*"0+15)&"J+9.'2"'*".%'.<"'?."<.5*<'"(%'*"'?." 0*,,.@.A&"7+(,2"6<(1.",*@"(9"<.X)(<.7"N2"'?."0,.<2"H6'i""

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- $\begin{array}{l} f & H"6*15, +(\%+\%''\%*'(9(.\&"'?."O(B(,"C(@?'\&"D">(',."\$E"O**<7(\%+'*<"(\%"I<('(\%@"'?+'"'?.2"I*),7",(Y."'*"I('?7<+I"'?."9*<1+,"6*15, +(\%''"*<"+\%2"+,..@+'(*\%\&"'?.<.(\%i"))) \end{array}$
- f >?."<.&5*%7.%'"(&"%*",*%@.<".%<*,,.7"*<".15,*2.7"N2"'?."0*,,.@.i"*<"

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\$%" 6+&.&" I ?.<." ('" +55.+<&" N+&.7" *%" +%" (%('(+,"<.5*<'" '?+'" '?.",.1.%'&" &'+'.7" +N*B." I*),7" N." &+'(&9(.7/"N)'''?."6*15,+(%+%'"7*.&"%*'" I (&?"'*"9(,."+"9*<1+,"6*15,+(%'/"'?."O(B(,"C(@?'&"

- f I?.'?.<"'P+B."N..%"*'?.<"<.5*<'&"*9"*'?.<"G<*?(N('.7"0*%7)6'"*<"*'?.<"1(&6*%7)6'"N2" '?.'<.&5*%7.%'i""
- $\begin{array}{l} f & :?."6*15, +(\%+\%'A\&"(\%'.<.\&'"(\%''?."0*,,.@."\%*'"5)<\&)(\%@"+\%"(\%B.\&'(@+'(*\%"*<"7(\&6(5,(\%+<2"+6'(*\%"+\%7"'?."(15+6''"*9)\&)6?"+6'(*\%\&"*\%"'?."6*15, +(\%+\%'i"")))) \\ \end{array}$
- f I?.'?.<"'?."O*,,.@."5*&&.&&.*"*'?.<"1.+%&"'*"*N'+(%"<.,.B+%'".B(7.%6.i""
- f = 9 + (<% . &&"6*%&(7 . <+ '(*%&"9*<"N*'?"'? . "6*15, +(%+%'"+%7"'? . "<. &5*%7 . %'i'"))))
- f '?."0*,,.@.A&"*N,(@+'(*%"'*"5<*B(7."+"&+9."+%7"%*%:7(&6<(1(%+'*<2".%B(<*%1.%'i"+%7""
- $f + \frac{2}{*}2$

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 $\begin{array}{l} 7.:<1\left(\%+'(*\%''\,'?+'''\,?.\,'<.\&5*\%7.\,\%'''\,?+\&''\,.\%@+@\,.7''\,(\%''\,'?.\,''6*\%7)6'''\,+\&''\,+,.@\,.7a''>?\,.''<.\&5*\%7.\,\%'''\,(\&''\,.5<.\&)\,1..7''\%*''<.\&5*\%\&(N,..'9*<'''?..''6*\%7)6''''?+'''(\&'''?..''\&)\,Nb.\,6'''*9'''?\,.''(\%B.\,\&'(@+'(*\%/'')\%,.\&\&''+\%7'')\%'(,"+'')7.\,6(\&(*\%''*9''<.\&5*\%\&(N(,('2''?+\&''N...\%''\,1+7.'')5*\%'''?..''6*\,1\,5,..'(*\%''*9''?..''+7b)7(6+'(*\%''5<*6.\&)a) \\ \end{array}$

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- $f \quad ?*I"'*"\&. < B."(15+<'(+,,2/"(\%6,)7(\%@"N2"+B*(7(\%@"5<.b)7@1.\%'"*9"'?."9+6'\&"+'"(\&\&)./"6*\%9,(6'\&"*9"(\%'.<.\&'/"+\%7"N(+\&i"+\%7"))) \\ +\%?"(\%'.<.\&'/"+\%7"N(+\&i"+\%7")) \\ +\%?"(\%'...,\%') \\ +\%?"(\%'.$
- $\begin{array}{l} f & (\&\&) \ .\&" \ *9" < .\,, \ B+\%6." \ *9" \ X) \ .\&'(\ *\%\&" \ +\%7" \ .B(7.\%6./" \ (\%6,) \ 7(\%@" \ I \ ?\,.\%" \ X) \ .\&'(\ *\%\&" \ +\%7" \ .B(7.\%6." \ +N*) \ ''' \ ?\,."6* \ 1 \ 5, \ +(\%+\%' \ A\&"\&.4) \ +, \ '5<. \ 7(\&5*\&(\ '(\ *\%*<" \ 5<(\ *\&.4) \ +, \ "N. \ ?+B(\ *<" \ +<."\%*'' \ <\,., \ B+\%'a" \ A\&" \$

 $\label{eq:basic_start} \$B.\&'(@+'*<\&''1)\&'''?+B.''<+(\%(\%@''*\%'''?.''9*,,*I(\%@''5<(*<'''*''6*11.\%6(\%@''+''<*,.''(\%''+\%2''6+\&.''(\%B*,B(\%@'')<)(',.''§E''J.4)+,''O+<+\&1.\%''') \label{eq:basic_start}$

f '?."7.9(%('(*%"*9"&.4)+,"?+<+&&1.%'")%7.<"S="0LC"!RKaSR\+]i"

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H55.%7(4" H" *)',(%.&" '?."

 $\label{eq:starter} \begin{array}{l} ``*"<.\,,.B+\%'"(\%9^*<1+'(*\%/"`?."\$\%B.\&'(@+`*<"I(,,".45,+(\%"`*"`?."5+<'2"I?*"5<*5*\&.7"`?."X).\&'(*\%\&"+\%2"7.6(\&(*\%"`*".46,)7."+"X).\&'(*\%"*"`<.,.B+\%'a") \end{array}$

<u>-%,."1F</u>&

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 $\begin{array}{l} O_{+<(\%@\&" I (,,"N."?..,7"B(+"B(7.*6*\%9.<.\%6(\%@a"G<(*<"'*"'?."?.+<(\%@/"'?."O_{+<(\%@"U99(6.<" I (,,"<.6.(B."(\%\&'<)6'(*%\&"<.@+<7(\%@"'?."*5.<+'(*\"*9"+\%2"+)7(*:B(\&)+,".X)(51.\""9*<"'?."?.+<(\%@a"3+6?"5+<'(6(5+\%''\&?+,,"+,\&*"N."5<*B(7.7"I ('?(%\&'<)6'(*\%\&"*\"?*I"'*'+66.\&\&"?."?.+<(\%@a"3+6?"?.+<(\%@a"3+6?", +<(\%@" I (,,"N."+)7(*"<.6*<7.7a"8*"(\%7(B(7)+,"(\&"5.<1(''.7"'*"<.6*<7"I?(,."'?."?.+<(\%@"(\&"'+Y(\%@"5,+6.a">?."<.6*<7"I?(,."'?."?.+<(\%@"(\&"'+Y(\%@"5,+6.a">?."<.6*<7"I?(,."'?."?.+<(\%@"(\&"'+Y(\%@"5,+6.a">?."<.6*<7"(\&"(\&"'?.")?.+<(\%@"(\&"',")?.")))) \\ & < .6*<7(\%@"(\&"'?."5<*5.<'2"*9"U66(7.\%'+,"0*,,.@."N)'"I(,,"N."+B+(,+N,."'*"'?."5+<'(.\&"9*<",(\&'.\%(\%@"N2"))))) \\ & < .6*\%'+6 \end{array}$

 $\begin{array}{l} \$9".('?.<"5+<'2"7*.\&"\%*"+55.+</"'?.(<"+7B(\&*<"I(,,"N."5<.\&.\%'"9*<"'?."5)<5*\&."*9"+\&Y(\%@"X).\&'(*\%\&"*9"'?."*'?.<"5+<'2/"*<"*9"I('%.&&.&a";)<(\%@"'?."?.+<(\%@/"(9".('?.<"5+<'2"?+&"+\%2"9*,,*I:)5"*<"6,+<(92(\%@"X).\&'(*\%\&"9*<"'?."*'?.<"5+<'2/"*<"9*<"I('%.&&.&A/"'?."X).&'(*\%&"1)&''N."&)N1(''.7"(\%"I<('(\%@"'*"'?."O.+<(\%@"U99(6.<"I(,,"7.'.<1(\%."'?."<..,B+%6."*9".+6?"X).&'(*\%"+\%7".45,+(\%"I?."X).&'(**,"*9",*6?"X).&'(**,"*7".45,+(%"I?."X).&'(*,"*1),*(*,"*1),*(*,"*7".45,+(%"I?."X).&'(*,"*1),*(*,"*1),*(*,"*7".45,+(%"I?."X).&'(*,"*1),*(*,"$

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		Μ		Α			

- f H%"*B.<B(.I"*9"'?."5<*6.7)<+,"*5'(*%&"+%7"5<*6.&&/"(%6,)7(%@"H7+5'+N,."C.&*,)'(*%"+%7";(&6(5,(%+<2"C.&*,)'(*%a"))))))
- $f \quad 345, +(\%"'?+'"'?."\&')7.\%'"?+\&"+"<(@?'"'*"+\%"+7B(\&*<"*9"'?.(<"6?*(6."7)<(\%@"'?."5<*6.\&\&"+\%7") \\ 5<*B(7."+",(\&'"*9"0*,,.@.".15,*2..\&"'<+(\%.7"+\&"+7B(\&*<\&")5*\%"<.X).\&'a"$
- f >?..0*, ...@.A&"+, 6*?*, "+%7"7<)@"+1%.&'2"5*, (62a"
- f >?."0*, ...@.A&"5*, (62"5<*?(N('(%@"<..'+,(+'(*%a"))))))

>?."\$%B.&'(@+'*<"I(,,"6*11.%6."'?."(%B.&'(@+'(*%"*%6."'?."'(1."9*<"'?."5+<'(.&"'*"*Nb.6'"?+&"5+&&.7" *<"+%2"*Nb.6'(*%&"?+B."N..%"<.&*,B.7a""

8.%\$"0"1,.@&'1C%/#"F,#"31&

<(')'&%6Q&7)4L&)N+/'(866

>?."\$%B.&'(@+'*<"I(,,"(%'.<B(.I"+,,"5+<'(.&"+%7"<..,B+%''I('%.&&.&"+%7"@+'?.<"7*6)I.%'+<2".B(7.%6."5<*B(7.7"N2"'?."5+<'(.&"+%7"+%2"(7.%'(9(.7"I('%.&&.&a">?."\$%B.&'(@+'*<"I(,,"5<.5+<."+"&)II+<2"*9" $.+6?"(\%'.<B(.I"_$\%'.<B(.I"J)I1+<2`]a">?."$%B.\&'(@+'*<"I(,,"&?+<.."?."$%'.<B(.I"J)I1+<2"I('?"$ '?."(%'.<B(.I..a">?."(%'.<B(.I..JI)I1+<2`]a">?."\$%B.&'(@+'*<"I(,,"&?+<.."?."\$%'.<B(.I"J)I1+<2"I('?" $'?."(\%'.<B(.I..a">?."(\%'.<B(.I..."I(,,"?+B."'?<..."\S]"N)\&(\%.\&\&"7+2\&"*55*<')%('2"'*"6*<<.6'"*<"$ 6*11.%'"*%"+%2"&'+'.1.%'&"1+7."(%''?."\$%'.<B(.I"J)I1+<2a>?."7.+7,(%."1+2"N.".4'.%7.7"9*<"@**7"6+)&./")5*%"<.X).&'"'*"?."\$%B.&'(@+'*<a"\$9"'?."(%'.<B(.I.."?+&"%*"6*<<.6'(*%&"'*/"*<"6*11.%'&"*%/"'?."\$%'.<B(.I"J)I1+<2/"'?."(%'.<B(.I.."I(,,"&(@%"+%"+6Y%*I,.7@.1.%'"?+'"'?."(%'.<B(.I.."?+&"<.B(.I.7"+%7"+@<..&"?+'"?."\$%'.<B(.I"J)I1+<2"(&"+66)<+'.a"\$9"'?."(%'.<B(.I..."N.,(.B.&"+<...%.6.&&+<2"'*".%&)<..."?."+66)<+62"*9"'?."(%'.<B(.I..."I).%'**<"6?+%@.&"I?(6?"'?."(%'.<B(.I..."N.,(.B.&"+<...%.6.&&+<2"'*".%&)<..."?."+66)<+62"*9"'?."(%'.<B(.I..."A&"&'+'.1.%'a"\$9"%*"<.&5*%&."(&"<.6.(B.7"9<*1"'?."(%'.<B(.I..."N.)).

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./+4@+&/'(86R++)'(86

(2')(+,+,6)

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Μ	Α	A		,	Μ	,	F	Μ	

 $\begin{array}{l} H55.\%7(4"0"*)', (\% .\&"'?."7(\&6(5,(\%+<2"<.\&*,)'(*\%"5<*6.7)<.\&"'?."0*, ..@."9*, .*I\&"(\%"<.\&*,B(\%@"+"@<(.B+\%6."'?+'"+"5.<&*\%"?+&"N..\%"\&)Nb.6'.7"'*"&*\%:>(',.."&E"Q(\&6*\%7)6'"N2"+\%"+71(\%(\&'<+''</"&'+99"'1.1N.</"*<"9+6), '2"1.1N.<"(\%"B(*,+'(*\%"*9"'?."0*, ..@.A\&"J.4)+,"+\%7"$\%'.<5.<&*\%+,"Q(\&6*\%7)6'"G*,(62a") \end{array}$

23#"6%&3>&'1C%/#"F,#"31&&

- f >?."6*15,+(%+%'A&"%+1.i")
- f 8+')<."*9"'?."6*15,+(%'i"
- $f = J5.6(9(6"5*, (62"B(*, +'(*\%\&"+, ..@.7"\setminus.a@a/"\&.4)+, "+\&\&+), '/"<+6(+, "?+<+\&\&1.\%'/"<.'+, (+'(*\%)i")))))$

f

9<*1"'?."\$%B.&'(@+'(*%a" U%6."'?."\$%B.&'(@+'*<" (&" &+'(&9(.7"'?+'"'?."<.5*<'" (&" 6*15,.'./"'?." \$\B.&'(@+'*<" I (,,"&)N1('''?."<.5*<'"'*"'?."O(B(,"C(@?'&"D">(',."\$E"O**<7(%+'*<a">?."O(B(,"C(@?'&"D"))))) >(',."\$E" 0**<7(%+'*<" I (,,"<.B(. I"'?."<.5*<'"+%7"+&&.&&" I ?.'?.<".5*<'"7.1*%&'<+'.&/" N2"+" 5<.5*%7.<+%6."*9"'?.".B(7.%6./"'?+'\"\!]"'?.".B(7.%6."&)55*<'&"'?."\$%B.&'(@+'*<A&"9+6')+,"9(%7(%@&i" +%7" \#]" '?." \$%B.&'(@+'*<A&" 9+6')+," 9(%7(%@&" &)55*<'" '?." \$%B.&'(@+'*<A&"),'(1+'." 9(%7(%@" *9"

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<.&5*%&(N(,('2"*<"%*%:<.&5*%&(N(,('2a"

>?." 0(B(,"C(@?'&"D">(',."\$E" 0**<7(%+'*<" 1+2"<.X)(<."'?+'"'?."\$%B.&'(@+'*<"6*%7)6'"+77('(*%+," (%B.&'(@+'(*%/"6*%&(&'.%'" I('?"'?."5<*6.7)<.&"*)',(%.7"+N*B.a"U%6."'?."O(B(,"C(@?'&"D">(',."\$E" 0**<7(%+'*<" ?+&" 6*%9(<1.7" '?+'" '?." L(%+," C.5*<'" (&" 6*15,.'./" '?." 0(B(," C(@?'&" D" >(',." \$E" 0**<7(%+'*<"I(,,"5<*B(7."+"6*52"*9"'?."L(%+,"C.5*<'"'*"'?."5+<'(.&"(%"+"&.6)<."1+%%.<a"''

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c?.<."'?."\$%B.&'(@+'*<"6*%6,)7.&"'?+'"+"B(*,+'(*%"*9"'?(&"G*,(62"?+&"*66)<<.7/"'?."+55<*5<(+'."

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\$9"+"5+<'2"<.X).&'&"'?."(%('(+'(*%"*9"+%"+7+5'+N,."<.&*,)'(*%"5<*6.&&"+%7"'?."O(B(,"C(@?'&"D">(',."\$E" O**<7(%+'*<"+@<..&"'?+'''?."1+''.<"(&"+55<*5<(+'."9*<"+7+5'+N,."<.&*,)'(*%/".+6?"5+<'2"I(,,"<.6.(B." +"I<(''.%"%*'(6."'?+'''7(&6,*&.&V"

- f >?."+,.@+'(*%&i")
- $\begin{array}{ll} f &>?.\,"5+<'(.\&A"<(@\,?\,'''\,*''\,I\,('\,?7<\!\!+\,I\,"9<\!\!*\,1\,"+7+5\,'+N,\,."<.\&^*,\,)\,'(*\%"+\%7"<.\&)\,\,1\,\,."*<"(\%('(+'\,."7(\&6(5,(\%+<\!\!2"<.\&^*,\,)'(\%"\,I\,(',\%"\,I\,(',\%"\,''\,.\&^*,\,.&^*,\,.&^*$
- $f \qquad \$\%9 * < 1 + '(*\%" + N*)'" 1 + (\%' . \% + \% 6 . "*9" < . 6* < 7\&" * <"?* I" < . 6* < 7\&" 6*), 7"N."\&? + < . 7a"$

c ('?"+55<*B+,"9<*1"'?."0(B(,"C(@?'&"D">(',."\$E"0**<7(%+'*</"+9'.<"6*%&),'+'(*%"+%7"(%'+Y."I('?"?." +7+5'+N,."<.&*,)'(*%"6**<7(%+'*</"'?."6*15,+(%+%'"+%7"'?."<.&5*%7.%'"1+2"B*,)%'+<(,2"+@<..."*%"'?." 5<*6.&&"'?+'"N.&'"1...'&"'?."(%'.<&'&"+%7"%..7&"*9"'?."5+<'(.&a"H7+5'+N,."<.&*,)'(*%"1+2"(%6,)7." *%."*<"1*<."*9"'?."9*,.*I(%@"<.&'*<+'(B."+55<*+6?.&V"

 $\underline{O\&7'\&')\&) + -6 F'\&\&'''85 + P'' H''\&'<)6') < .7'' + \%7'' 9 + 6(, ('+'.7'' 6*\%B.<\&+'(*\%'' N.'I ..\%'' I*''*<'' 1*<.'''(\%7(B(7)+,\&/''1*\&''*9'.\%'''?.''6*15, +(\%+\%'/'''?.''<\&5*\%7.\%'/''+\%7g*<''*'?.<''6*11)\%(0.2(\&)+\%7)$

17,<#,:\$%%;%0%7"%/%3.%'1#%.C%1#"31/%>3.%#9%%B3\$\$%F%%B300+1"#@%

- $f = C.X) \cdot \&'(\%@"*<"<.X)(<(\%@"+"0*,,.@.".\%'('2"'*"5<*B(7."'<+(\%(\%@"9*<"('\&"4+99"*<"1.1N.<\&i"))))))))$
- f C.X).&'(%@"*<"<.X)(<(%@"'?."<.&5*%7.%'"'*"<.6.(B."'<+(%(%@i"
- f = 0 * %'(%) (% @'' + % 2'' * 9'''? ..'5 < *' . 6'(B ..'' + % 7''%) 55 * <'(B ..'' 1 .. + %) < . %'' 5 < . B(*) % , 2'' . %' + N, (% ?. 7i'')
- f = \$7.%'(92(%@''?.'%..7'9*<''+%2''+77('(*%+,''*<''*%@*(%@''1.+&)<.&/''&)55*<'&''+%7''<.1.7(.&i''*<'')
- $f \qquad C.B(\&(\%@"0*,,.@."5*,(6(.\&/"5<+6'(6.\&/"*<"\&.<B(6.\&a"$

Р

+55<*5<(+'."<.&*,)'(*%"(%".+6?"6+&.a"

<u>*+#"A&%9/"#6!&#\$5,6@"5,'(8P</u>"J')7.%'&"1+2"N."<.1*B.7"9<*1"0*,,.@."?*)&(%@"+%7g*<"N+<<.7"9<*1"+55,2(%@"9*<"6+15)&"?*)&(%@"7)."'*"7(&6(5,(%+<2"B(*,+'(*%&"*9"'?(&"0*7.a"

 $\underbrace{>5, \$+(, '''(P'') 346,) \&(*\%''9<*1"0*, .@."5<.1(\&.\&/"+''.\%7(\%@"6,+&\&.\&/"+\%7"*'?.<"5<(B(,.@.\&"*<"+6'(B('(.\&"9*<"+\&5.6(9(.7"5.<(*7"*9"'(1./"+&"&."'9*<'?"(\%''?."\&) \&5.% \&(*\%''\%*'(6.a" 8*'(6."*9"'?(\&"+6'(*\%'') 1.(,,"<.1+(\%''(\%''?."\&') 7.\%'A\&"6*\%7) 6'''9(,."+\%7" I(,,"N."5.<1+\%.\%',2"<.6*<7.7"*\%''?."&')7.\%'A\&"6*\%7) 6'''9(,."+\%7" I(,,"N."5.<1+\%.\%',2"<.6*<7.7"*\%''?."&')7.\%'A&"6*\%7('(*%\&" 9*<"<.+71(&\&(*\%'' 1+2" N." &5.6(9(.7" (\%''?."&)))))) 1.25.\%$

 $\frac{K?\$5\%, '''(P"}{G} < 1 + \% . \%''' < 1 (\% + '(*\%"*9"\&')7 . \%''\&' + ')\&' + \%7" . 46,)\&(*\%"9<*1"0*, .@."5<.1(\&.\&/"5<(B(,.@.\&/"+\%7"+6'(B('(.\&a">?(\&"+6'(*\%"I(,,"N."5.<1+\%.\%',2"<.6*<7.7"*\%"'?."\&')7.\%'A\&''+6+7.1(6''<+\%\&6<(5'a")$

<u>2')NN''%-'(86F+8/++P</u>">?."0*,,.@."1+2"I('??*,7"+I+<7(%@"+"7.@<..."*'?.<I(&.".+<%.7")%'(," '?."6*15,.'(*%"*9"'?."5<*6.&&"&.'"9*<'?"(%"'?(&"G*,(62/"(%6,)7(%@"'?."6*15,.'(*%"*9"+,," &+%6'(*%&"(15*&.7/"(9"+%2a"

 $\underline{3 \ } \underline{N + / P}^{"} U'? . <"\& + \%6'(*\%\&" 1 + 2"N."(15*\&.7"(\%\&'.+7"*9/"*<"(\%"+77('(*\%"'*/"'?*\&."\&5.6(9(.7"?.<.a"))))) \\ J \ (B(6./".7)6+'(*\%/"*<"<.\&.+<6?"5<*b.6'\&" 1 + 2"+,\&*"N."+\&\&(@\%.7a"")) \\ C \ (B(6./".7a)") \\ C \ (B(6.$

 $\frac{R5\%)'\$\%+6>\&(7)''(,P'',Q^{*<.''}+\%''*\%.''*9'''?.''\&+\%6'(*\%\&'',(\&'.7"+N*B.''1+2"N.''(15*\&.7"9*<''+\%2'')))}{\&(\%@,.''B(*,+'(*\%a'')))}$

K="

$$\begin{split} \&) 6?" + \&".7) 6 + '(*\% +, "(\% ('(+'(B.\&"+\%7g*<"<+(\%(\%@\&a"\%)"+77('(*\%/"'?."O(B(,"C(@?'\&"D">(',."$E"O**<7(\%+'*<" I(,,"6*\%'(\%).""*"5<*B(7."9*<"'?."6+<."+\%7"\&)55*<'"*9"'?."5+<'(.\&"+\&"+55<*5<(+'./"(\%6,)7(\%@"'?."*\%@*(\%@" 5<*B(\&(*\%"*9"+55<*5<(+'./"(\%6,)7(\%@"'?."*\%@*(\%@" 5<*B(\&(*\%"*9"+55<*5<(+'."+66*11*7+'(*\%\&a"))))))))))]) \end{split}$$