

!''#\$%&'()*\$+&''',\$&-)&).&)/\$&0(1()+&'/\$&23)\$%&4.3567&.8&0(1()'')(.5&.8&0(''9(*):&''56& ;''1''<\$&0(1()&!%.=(7(.57&(5&>.57)%3?)(.5&&(5))''?)7&

> A/09,B90"AC"D)00" (8ED"F9G"FFH" !IJ\$!"K/0"L9*:90"%M+C>"(,+C"N\$\$" 0*M2O+>"'%"J#I\$N" PJQJR"NSITSU\$N" <u>V1)00W6:,1@9GC</:</u>"

A\$77(.5&'0'\$+&''',\$&-&)/\$&0(1()+&'/\$&23)\$&4.3567&.&0(1()'')(.5&.&0(''9(*):&''56&))/&0(1()+&'')&23)



!"

 $</06,*)<,2/0"*+@9,+1"</0,*9<,6>"32M+6"6=+<2;2<"+_9:=@+6"/;"B+9M2@-"0+3/,29,+1"FXF" =*/M262/06>"901"+_=@/*+6",B+2*"=)*=/6+"901"V)6,2;2<9,2/0C""$

$GB \underbrace{0 2 0 \&! \% = (7(.57\&G\%\&\&A)''56''\%6\&H''\%\&\&-5\&I''5:\&>.57)\%3?)(.5\&@\&*'')\&6\& > .5)\%''?)7\&''56\&G66\%\%77\&''56\&G^{**}.?'')\&J 3 1 \&\%.37\&@(7,7\&)$

$$\begin{split} FXF" = & \frac{M262}{06",97+"0} : + \frac{1}{6"}, * : 6"901"9*+"[2], + \frac{1}{2}, * \frac{1}{2}, 0 \\ & + \frac{1}{2}, + \frac{1}{2}, 0 \\ & + \frac{1}{2}, + \frac{1}{2}, 0 \\ & + \frac{1}{2},$$

$$\begin{split} & EB+"201\,)6,*-"6,9019*1";/*:6"9*+"0/,"9,-=2<90:"96":90\,)6<*2=,";/*:6"906/"+_<0)1+"/*"\\ & 02:2,"029\,]202,-"/0"0\,):+*/\,)6"<9,+3/*2+6"/;"/,B+*G26+"*+</M+*9\,]0+"19:93+60"fM+0"\\ & G2,B/\,),"</0,*9<,)90"=*/M262/06>",B+*+"9*+"02:2,6",/"*+</M+*9\,]0+"19:93+60"fM+0"\\ & 02:2,6"9*+"6\,]V+<,",/"</:=0+_"901"20</0626,+0,0-"9==02+1"0+390"1/<,*20+6"6\,)<B"96>"\\ ;/*"+_9:=0+>"b=*/_2:9,+"<9\,)6+c"</0<+*0203",/*,"19:93+6"P(++"3+0+*900-"|"HB202="F0".*)0+*"4"H9,*2<7"A("Xd'/00/*"A*C)".*)0+*"4"Xd'/00/*"/0"'/06,*)<,2/0"F9G"\\ & kk!J^{N}"PY+6,"H)\,]00"#$!#"f10:"20<(0"#$#$"()==00R"PB+*+9;,+*>"b.*)0+*"4"Xd'/00/*"\\ X'F"k1cRR"901"b;/*+6++9\,]202,-c"</0<+*0203"]*+9<B"/;"</0,*9<,"19:93+6"P(++>"|".")"\\ .*)0+*"4"Xd'/00/*"X'F"k!J^{N}N:"96"G+00"96"*+09,+1"1/<,*20+6"1+M+0/=+1",B*/)3B"\\ <96+"09GC"(++>"+C3C"|".*)0+*"4"Xd'/00/*"X'F"kk!J^{N} \end{split}$$

<u>!%.=(7(.5</u> &	<u>; \$7?%(#)(.5k.8k0 2 0k@\$73*)</u> k
H9-"0;"m" Y B+0"H921"	F2: 2,6"@29]2@2,-";/*"2O,+*+6,"P=9-TGB+OT=921R"/*" +_<)6+6"@29]2@2,-"2O"+M+O,"/;"/GO+*"O/OT=9-:+0,"
f_<@)62M+"*+:+1-""	$ \begin{array}{l} F2:2,6"@29]2@2,-";/*"M9*2/)6"19:93+6"901"@2:2,6",B+"\\ *+:+1-"9M92@9]@+"P2C+C>"*+=92*"/*"*+=@9<+:+0,>"/*"\\ 9M92@9]@+"206)*90<+R" \end{array} $
?/*<+" 8 9\+)*+"	F2:2,6" 0,*9<,)90"029]202,-";/*"=+*;/*:90<+"GB+0"<br <+*,920" 012,2/06"1+M+0/="</td
E+*:209,2/0";/*" '/OM+O2+O<+"	X;,+0"@2:2,6"*+"@/6," =*/;2,6R""
D26<@92:+*6""	$\begin{array}{l} F2:2,6"@29]2@2,-";/*"<+*,920"<2*<):6,90<+6"P2C+C>"\\ 126<@92:+*"/;"2:=@2+1"G9**90,2+6"/*";*/:"9@@"@29]2@2,-"\\ 96"9"$
Y92M+*6"/;"()]*/39,2/0" m"'/0,*/@+1"006)*90<+"	F2:2,6"*+206)*+*6"
P006);;2<2+0,R" F2[)219,+1"D9:93+6"	X;,+0"02:2,6",B+"029]202,-"/;"9"=9*,-";/*"1+09-"19:93+6" ,/"90"9:/)0,",-=2<900-"0+66",B90"9<,)90"1+09-"19:93+6"
F2[)219,+1"D9:93+" '9=6"	$\begin{array}{l} F2:2,6",B+"@29]2@2,-"/;"9"=9*,-";/*"1+@9-"19:93+6",/"9"\\:9_2:):"9:/)0,")6)9@-"@+66",B90"9<,)9@"19:93+6"\end{array}$
F2:2,9,2/06"/;"F29]202,-" 901"D9:93+"F2:2,6""	$\begin{array}{l} F2:2,6"@29]2@2,-"/;"9"=9*,-",/"9":9_2:):"1/@9*"\\9:/)0,\!$

 $\begin{array}{l} 0,"26"0/,",B+"20,+0,"/;",B26"=9=+*",/"911*+66"+9<B'/;",B+":90-"FXF"=*/M262/06"9,"\\ 0,"26"0/,",B+"20,+0,"/;",B26"=9=+*",/"911*+66",B+":-*291"/;",6)<B"=*/M262/06"20":/*+"\\ 1+,920>"20<0)1203":90-"/;",B/6+",B9,"B9M+"1+M+0/=+1",B+2*"/G0"126,20<,"]/1-"/;"\\ 0,9G0"/"''&''("9533-"\".*)0+*"4"Xd'/00/*"X'F"kk!J^N#"g"!J^IS0""006,+91>",B26"\\ =9=+*"G200";/<)6"/0"9";+G"B+9M20-"0+3/,29,+1"FXF"=*/M262/06"901>":/*+"\\ =9*,2<)09*0-"6,9,),+6"901"<96+"09G",B9,"6+,"*+6,*2<,2/06","B+2*"+0;/*<+:+0,0""\\ \end{array}$

$4\mathbb{B} \ge .11.5\ \text{KL''}1\ \text{\#}\ \text{\%}\ \text{KL''}1\ \text{\#}\ \text{KL''}1\ \text{K$

 $\begin{array}{l} 00"6,9,+6"GB+*+",B+-"9*+"0/,"=*/B2]2,+1"/*"*+6,*2<,+1"P6++"6+<,2/0"000"]+0/GR>"\\ B+9M20-"0+3/,29,+1"FXF"=*/M262/06":9-"20<0)1+"201+:02,->"1/009*"02:2,6"/*"\\ 206)*90<+"]96+1"02:2,6"P20<0)1203"02[)219,+1"19:93+6"02:2,6R>"901"G92M+*6"/;"\\ </06+[)+0,290"19:93+6C""\\ \end{array}$

#\$##"%& ' "()*+,-"./01203"4"5267"89093+:+0," '/0;+*+0<+" ./02,9"(=*2036>"?0/*219"

!C <u>001+:02,-"H*/M262/06</u>"

 $YB^{+++};^{+++}, /[1/"6/"901"GB^{+++}]9^{*}3920203" = /G^{+*}"9^{0}/G6^{*}]^{*}/91"201^{+}:02^{-}, -[20,$

001+:02,-"26"9"</0,*9<,"]-"GB2<B"/0+"+0393+6",/"69M+"90/,B+*" ;*/:"9"@+39@"</06+[)+0<+"/;",B+"</01)<,"/;"/0+"/;",B+"=9*,2+6"/*" /:"6/:+"/,B+*"=+*6/00"

 $i \text{CDC"} + 0,\text{C"} / 1 + \text{K} # \text{T} # \text{T} # \text{T} \frac{1}{2} . \text{K} = 0,\text{C} + 0,\text$

%"):#\$&-&N(56\$15():0"93*++:+0,"=*/M21+6"n"0+_=*+660-"901"

U"

+9 < B'', B + *''; / *''90 - '' < /06 + [) +0,290''19 : 93 + 6'', B9, '' : 9 - ''9 * 26 + '' /), '' /; ''/ *'' + <math>0, + '', /'', B26'' & 3 * + + : +0, + '' + - < + =, ''; / *'', B / 6 + ''6 = + < 2; 2 < ''2, + : 6'' /; '' $19 : 93 + 6'' + _ < 0) 1 + 1''; ' : '', B26''G92M + *''96'' :),) 9 0 - ''93 * + 1'') = / 0''] - ''$ YB+0"1*9;,203",B+"G92M+*>"<9*+;)@-"</0621+*",B+",-=+"/;"

#\$##"%& ' "()*+,-"./01203"4"5267"89093+:+0," ' /0;+*+0<+" ./02,9"(=*2036>"?@/*219"

 $\%6"6+,";/*,B"9]/M+>"20"\% @9679>",B+"*+6,*2<,2/06"6,+::203";*/:"90"201+:02,-"6,9,),+" \\ G+*+"20,+*=*+,+1",/"9==@-":/*+"]*/91@-",B90",/"201+:02,-"=*/M262/06>"]),"*9,B+*"$

k#IU#CN""%@@/<9,2/0"/*"@2:2,9,2/0"/;"@2912@2,-"

!#"

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00,+*+6,203@->"G2,B20",B+"201+:02,-"6+<,2/0"/;",B+" '9@2;/*029" '2M2@" '/1+>",B+*+"26"9" 9@6/"9"6=+<2;2<"=*/M262/0"+**/1\$''#"FXF"=*/M262/06C" '9@C" '2MC" '/1+"k#IU#CNC" '9@2;/*029" '2M2@" '/1+"(+<,2/0"#IU#CN"=*/M21+6^"

'90C" '2MC" '/1+"k#IU#"P:97203"M/21"901")0+0;/*<+9]0+" 201+:02,-"=*/M262/06"20"</06,*)<,2/0"</0,*9<,6",B9,"6B2;,"*267";/*" 6/0+"0+3023+0<+"/*"G200;)0":26</01)<,>"901"M/21",B+"69:+"G2,B" *+6=+<,",/"9<,2M+"0+3023+0<+"*267"6B2;,203"9;,+*"#\$!Sj"=*/M21+1>" B/G+M+*>",B+*+"9*+"<+*,920"+_<+=,2/06"96"900/G+1"20"<+*,920"/,B+*" '2M20" '/1+"6+<,2/06RC""

'900"H)]C"'/0,C"'/1+"kI!\$Q"P:9019,203",-=+"0"901",-=+"00" 12;;+*203"62,+"</012,2/06>"901"+0M2*/0:+0,900-"B9`9*1/)6"62,+" </012,2/06"=*/M262/06"20,/"=)]02<"</0,*9<,6Rj"

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'900"H)]0"'/0,0"'/1+"k!!\$Q"P;/*]211203"0/<90"=)]02<"93+0<2+6" ;*/:",*906;+**203"*267"/;"1+6230"+**/*6"/*"/:2662/06",/",B+" </0,*9<,/*>"+_<+=,"20"<0+9*0-":9*7+1"1+6230T])201"=*/V+<,6Rj"

6,9,),/*-"*+6,*2<,2/06^"

 $\begin{array}{l} & 9@2; /*029"26"=+*B9=6": /6, "=*/@2; 2<"20"+09<, 203"6,9,), +6"*+3) @9, 203", B+"</06, *)<, 2/0"\\ & 201) 6, *->"B9M203"6,9,), /*-"6<B+: +6"; /*"@2<+06203" /; "</0, *9<, /*6>", B+2*"126< 2=@20+>"\\ & 901"*+6, *2<, 2/06" /0"<+*, 920", +*: 6"; /*"=+*6/06"</0, *9<, 203"G2, B"@2<+06+1"</0, *9<, /*6"\\ P '900".) 60" 4 "H*/; C" '/1+"kI$$$>"+, 6+[CR>"]/, B"=)] @2<"901"=*2M9, +"</0, *9<, 203"P '900" '2M2@" '/1+"kU$$$"+, C"6+[CR>"901"6=+<2; 2<90@-"*+@9,+1", /"=)] @2<"</0, *9<, 203") 01+*", B+" '902; /*029"H)] @2<" '/0, *9<, 203" '/1+C"?/*"+_9:=@+>" '902; /*029"B96", B+"; /@0/G203" \\ \end{array}$

</0,*9<,)9@"966) :=,2/0"/;"*267"26"9"[)+6,2/0"/;";9<,";/*"9"\)*->"0/,"9"\)13+\cc"B<''34;\ ?\\\$K+9''=+9)\\$J51''G5-#\\$'(1\\\"#!\\$"\%*2`\C"Q\\$S>"!!!"HC\$1"!\$\\$S>"!\$!\\$"P#\$\$NRC""" $(0,B/)3B''90C'''AC''' + k#IU#(N'26'']*/910-''G*2,+0>'',B+''A 59I=6962 & < < /)*,''906/'' + < /0 < 20+1'',B26''6,9,),+''G2,B'',B+''201+:02,-''6,9,),+>''</0<0) 1203^{''}$

?2*6,>",B+"90,2T201+:02,-"6,9,),+>"6+<,2/0"#IU#>"G96"20,+01+1",/" <B903+",B+"09G",/"=*/B2]2,"/0+"=9*,-",/"9"</06,*)<,2/0"</0,*9<," ;*/: "9M/21203"029]202,-",/",B2*1"=9*,2+6"]+<9)6+"/;"2,6"6/0+" 0+3023+0<+"]-";/*<203",B+"/,B+*"=9*,-",/",B+"</0,*9<,",/"=*/M21+"

$-QB \qquad \underline{P36(?("*\&0(1()7\&).\&K58.\%?\$1\$5)\&.\&k020\&!\%.=(7(.57\&)))) = (7(.57\&))$

$$\begin{split} X), </:+6"; /*"126=), +6"20", B+"</0, *9<, 203"201)6, *-"g"</0626, +0, "G2, B"2, 6"09: +"g"9*+" \\ :/6, -"</0, */(0+1", B*/)3B", B+"(09G"/;"</0, *9<, 60""00"9"]*/91"(+390"6+06+)": /6, "/;", B+" \\ .2: +>"</0, *9<, "09G"*+: +12+6"901"</0, *9<, "19: 93+", B+/*2+6"9*+"9==02<9](+0, "26" \\ [)2, +"</:: /0)"B/G+M+*>"; /*"9"=020, 2; ;", /"966+*, ", /*, "<092: 6"20"9112, 2/0", /"/*" \\ 90, +*09, 2M+0-", /"</0, *9<, "<092: 6"939206, "9"</06, *)<, 2/0"201)6, *-"1+; +0190, 0"FXF" \\ =*/M262/06"9*+'', +0"90"266)+"9, ", B26"20, +*6+<, 2/0"/; ", /*", "901"</0, *9<, "09G0"" \\ \end{split}$$

'/)*,6"B9M+"6,*)33@+1"G2,B",B26"20,+*6+<,2/0C""X0+"9),B/*"0/,+1^"

$$\begin{split} &YB+*+"6,9,+"@9G"26"62@+0,>"3+0+*9@@-"2,"26"@+;,",/",B+"6,9,+06"</)*,6"\\ &,/"1+,+*:20+",B+"+0;/*<+9]2@2,-"/;"90"+_<)@=9,/*-"<@9)6+("\\ &EB+*+;/*+>"+9<B"6,9,+06"B23B+6,"</)*,":)6,"1+;20+",B+"9==*/=*29,+"\\ &]9@90<+"]+,G++0",B+";*++1/:",/"</0,*9<,"901",B+"=)]@2<"=/@2<-"\\ &</0<+*06"20M/@M+1"20"+_<)@=9,203",/*,"@29]2@2,-("%6"G2,B":90-"\\ &</iscide
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$$\begin{split} & E+00+66++"26"0/"+_<+=,2/0>"901",B26"9*+9"/;",B+"@9G"26"M93)+"901"\\ &,*/)]@+1"G2,B"</0;)62/00"?/*"0+9*@-";2;,-"-+9*6>"</0,*9<,203"\\ &=9*,2+6"901"@+39@"=*9<,2,2/0+*6"20"E+00+66++"B9M+"3*9==@+1"G2,B"\\ &+_<)@=9,/*-"<@9)6+6>"96",B+"E+00+66++"()=*+:+"'/)*,"B96"\\ &6,*)33@+1",/"<@+9*@-"1+;20+"",B+2*"+0;/*<+912@2,-0" \end{split}$$

EB+" '902; /*029" ()=*+:+" '/)*,"6): :9*2`+1",B+"6,*)330+"96"; /00/G6^"

 $0,B+"09G"B96"0//7+1"<9^{+};) 00-"901"G2,B"6/:+"67+=,2<26:"9,",B/6+" GB/"9,,+:=,",/"</0,*9<,"9G9-",B+2*"0+390"029]202,-";/*",B+" </1::2662/0"/;",/*,600"/)*,6"901"</:+0,9,/*6"B9M+"/]6+*M+1" ,B9,"6)<B"*+0+6"=/6+"9"</0;02<,"]+,G++0"</0,*9<,"901",/*,"09G0" X0",B+"/0+"B901"26",B+";*+1/:"/;"2012M21)906",/"93*++",/"02:2,"$

 $\begin{array}{l} X),621+"/;"126=),+6"]+,G++0"6/=B26,2<9,+1"</::+*<29@"=9*,2+6>"3+0+*9@->":90-"\\6,9,+6"9==@-"90"b)0</06<2/09]2@2,-c",-=+"909@-626"]96+1"/0"M9*2/)6";9<,/*6("%6" @9:+0,+1"]-"/0+"9),B/*^" \end{array}$

EB+"=*/]0+: "G2,B"1+,+*: 20203",B+"+0; /*<+9]202,-"/;"90" $+ _<) (=9, /* - "< (9) 6 + "26" 0 / , "9" (9 < 7" / ;"*) (+6" / *" < 96 + "(9 G"T", B + ") (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9 < 7" / ;"*) (9$ =*/]@+: "26", B9, ", B+*+"9*+", //": 90-"*)@+60". +<9)6+"+ <)@=9, /*-"<09)6+6"9*+"9":9,,+*"/;"</0,*9<,"09G>"+9<B"6,9,+06"6)=*+:+"</)*," 26",B+"9),B/*2,9,2M+"20,+*=*+,+*"/;",B+6+"=*/M262/06C"EB+*+;/*+>" $B^{+}() = *+ : + "' /)*, "/;", B^{+} e 02, +1"(, 9, +6"26"/00-"9]0+", /"$ =*/:) $(39,+"*)(+6"1+9(203"G2,B"+_<)(=9,/*-"<0))(+6"GB+*+";+1+*9("))$ 6.9,),+6"9*+"</0<+*0+10" (20<+",B+*+"26"0/,"9"62030+"]*23B,T020+" *)@+",/"9==@->"+M+*-"6,9,+"B96"B91",/"</ : +")="G2,B",B+2*"/G0"6+," /;"6,9019*16>";9<,/*6>"/*"+@+:+0,6C"(/:+"6,9,+6"B9M+"<B/6+0",/" ;/@/G" '902;/*029"20",B+")693+"/;",B+"02(I3";9<,/*6>"q"r"/,B+*" 6,9,+6"B9M+"</0621+*+1",B+"5+6,9,+:+0,"P(+</01R"/;"'/0,*9<,6>"qr" 901"+M+0": /*+"B9M+"<B+**-T=2<7+1"+0+: +0,6"901";9<,/*6";*/:"]/.B",/"<*+9,+"9"0+G"6,9019*1("q"r"YB20+"B9M203"6/":90-"*)0+6",/" <B//6+";*/:":9-"0/,"6++:"027+"9"]91"21+9>"B9M203",//":90-" 6,9019*16"<90": 97+",B+"=*/<+66"/;"909@-`203"+ <)@=9,/*-" =*/M262/O6"2O+;;+<,2M+C"

 $(+M+*90"6,9,+6"B9M+"<*+9,+1":+,B/16";/*"+_9:20203"+_<)0=9,/*-" < 09)6+6"T"*+6)0,203"20"6+M+*90"12;;+*+0,",+6,6"901"0):+*/)6")02[)+";9<,/*60"e0;/*,)09,+0->"B9M203",//":90-",+6,6",/"<B//6+" ;*/:"/00-"<9)6+6"</0;)62/0"GB+0"9,,+:=,203",/"9090-`+"90" +_<)0=9,/*-"<09)6+6"</pre>$

89332+"F)>"<u>'X88fiE^"%39206,"H)]@<"H/@<-^"f0;/*<+9]2@2,-"/;"f_<)@=9,/*-</u>" '@9)6+6>"\\$"(C"E+_C"FC"5+MC"QJI>"QJU"P()::+*>"#\$!JR"P<2,203"20";//,0/,+6>"Q2(*I*3\$1134.668-/G**ig**67.043 PI,B" '2*("!J\JR>"Q!Q"?C"#1"!J#>"!JN>"26"3*/)01+1"20",B+" *+</302,2/0",B9,",B+"/] $^{0}239,2/0$ ",/"206)*+"90/,B+*"=9*,-"939206," ,B+"</6,"/;",B+"/,B+* $^{0}6$ "/G0"0+3 $^{0}23$ +0<+"26"n6/"+_,*9/*1209*-"901" B9*6B"C"C"C>n"H2:69)\$?%\$! "G"95&"\$5()\$W5, "9\$H)%"P!JSIR>"X* ^{0}C "F9C" %==C>"!IN"(/("!!\$>"!!S>"G2,B"n,B+"=/,+0,290" $^{0}29$]2 $^{0}22,2$ +6""966):+1"C" C"C"9G+6/:+n>"P2,6\$\G("9;\$A 2,253\$'(;%\$86%\$?%\$F69,<"9(\$'()%\$ B2=3+1\$!"9?+1"\$86%#\$;2495>",B9,"9"=*/:26/*"G/) $^{0}1$ "0/," $^{0}23B,0$ -" 9<<+=,"6)<B"9"])*1+0"70/G203 0 -"901"G2 $^{0}2030$ -C"X)*"1+<262/0" ,/19-"62:= $^{0}2$:= $^{$

 $p ("EB+"</0,*9<,/*"GB/"70/G2030-"901"G2002030-"=*/:26+6",/" 201+:02;-",B+"</0,*9<,++";/*",B+"09,+*06"0+3023+0<+":9-"0/," 6)<<+66;)00-"</:=0920"2;"6)<B"9"*+[)2*+:+0,"G96":91+"+_=02<2,"]-",B+",+*:6"/;",B+"</0,*9<,C"$

53;6\$@*2*(&\$@*5"*\$*L""*\$?%\$*K"*)%\$!,%\$*L*%*P*##\$*LL8*"P'CDC"'90C" 89-"S>"#\$!\R"#\$!\"eC(C"D26,C" Ffu0("NJQ#S>"9,"#UT#JCRC""

i /, "+M+*-"V) * 2612 <, 2/0"900/G6"FXF"=*/M262/06"; /*"=+*6/090"20V) *->"B/G+M+*("EB+" ()=*+:+"'/)*, "/;"K2*32029"B96")0+[)2M/<900-"B+01",B9,"=)]02<"=/02<-";/*]216",B+" +0; /*<+:+0, "/;"9"*+0+96+"/*"G92M+*"; /*"=+*6/090"20V) *-"<9)6+1"]-";),)*+"9<,6"/;" 0+3023+0<+("P!"''\$06<(;6(T;\$P) *T0\$?%\$J+1<*6()\$5()\$C5(?+33"\$J%J%586%"U"K90" JIN>"JIU>"!!"(CfC"U#J>"US\$"P!UJ\$Rj">+",,\$2%\$L51"\$H59196:,\$86 * *2(+,-\$P;;61%"#QQ" K90("!J!>"L91").

$\begin{array}{c} 4\$ & \underline{\mathbf{I} "5: \& > .3\%} \\ 7\&TA)\%(?)*: \& > .57)\%3\$U\&0 \ 2 \ 0\&! \% .= (7(.57\&) .\& 0(1)\&' /\$(\%\& A?.\#\&''56\&G\#\#(?''))(.5\&) \end{array}$

)0+[)2M/<9@"@903)93+"20",B+"93*++ : +0,"GB2<B"=*+<@)1+6"6)<B" @29]2@2,-C"

 $H29(", \$?\%8 < + *("-\$!G""4"P#\$QR"!#S"'900\% == CQ, B"!\$NI>"!\$ \setminus T$

#\$"

$A + MP^{**} = 9+13(3A0,09,409,409,400) + (1) = (10S + 100 PD(190(1910R PGB2<B20))) + (1)$

 $\frac{1}{0626} + 0, 0 - \frac{1}{3} GB + \frac{1}{9} + \frac{1}{9}, \frac{1}{2} < \frac{1}{2} < \frac{1}{9} GB - \frac{1}{9} GB + \frac{1}{9} + \frac{1}{9}, \frac{1}{2} < \frac{1}{2} GB - \frac{1}{9} \\ \frac{1}{9}, \frac{1}{9} BH + \frac{1}{9} + \frac{1}{9}, \frac{1}{9} = \frac{1}{9} B = \frac{1}{2} CB + \frac{1}{9} CB + \frac{1}{9} + \frac{1}{9} CB +$

>B >.3%)7&V\$5\$%''**:&R(**&J.)&K58.%?\$&0.2.0&!%.=(7(.57&8.%&@\$?,*\$77E& R(**83*E&.%&-5)\$5)(.5''**:&R%.5<83*&>.563?)&

$$\begin{split} & \text{EB} \) 6 \rangle "2, "26"+6=+<29 \& e^{-"2}:=/*,90,",/") 6+"<9*+;) \& \rangle "<\& +9*\rangle ") 0+[) 2M/<9 \& "901"6=+<2; 2<" \& 903 \) 93+"GB+0"=*+=9*203"FXF"=*/M262/06"20"93*++:+0,6\rangle "901"+06)*+"2, "G96" \\ & +_=*+66 \& e^{-"93*++1"}) =/00"(++>"+C30>"(,+M+0".0"F+66+*>"Q<" \& Y9"5, \&/; 154" \# > 6G \&, 6\& C95:, \&/012345, 69-\& 8352; "; \&, <5, \& L+*+, \& 69 \&/0, +(\& 2+; <\& L+5=+3+, ->"EB+"? \&/*219".9*" \\ & A/ \) *09 \& "i/M+:] +*"\# \$ \$!>"9, "! \& 0""" \end{split}$$

 $\begin{array}{l} 00"90/,B+*"+_9:=\emptyset+>"</0621+*",B+"<96+"/;"'(\&"9;633MJ5())\&86\%()?\%(3)\&C695)6\&8<"*\%()\&86\%()?\%()&86\%()&86\%()?\%()&86\%()&$

$$\begin{split} 1+;+0190,6";*/:",B+"0/66"/;"=*/;2,6"<0!92:"("EB+"'/)*,"126,203)26B+1"9<,2M+"901"\\ =9662M+"0+30!23+0<+";201203",B+"=0+912036"6,9,+1"9"<0!92:";/*"9<,2M+"0+30!23+0<+"\\ GB+0",B+"1+;+0190,"G96"9G9*+"/;",B+"=*/]0+:6"901"70/G2030-"*+;)6+1",/"\\ *+:+129,+",B+:("')%"9,"!$\IC""$$

!C (,9,),/*-"H*/B2]2,2/06"/0"FXF"H*/M262/06"

%6"911*+66+1"9]/M+"20"00"9"<96+"GB+*+",B+"@2:2,9,2/0"/;"@29]2@2,-"=*/M262/06"]9**+1" </06+[)+0,29@"19:93+6"901"@2:2,+1"*+</M+*-",/"b,B+",/,9@"9:/)0,"=921>c"/0+" '9@2;/*029"'/)*,"B+@1"bq'2M2@"'/1+r"6+<,2/0"!\\U"*+01+*6",B+"qr"@2:2,9,2/0"/;" @29]2@2,-")0+0;/*<+9]@+",/",B+"+_,+0,"2,"G/)@1"206)@9,+"D+;+0190,";*/:"20,+0,2/09@" ,/*,"@29]2@2,-Cc"!""#\$W"H66;,\$A")+5\$!%J%L%2%&L661!*59,\$L,)%"PiCDC"'9@C>"A)0+"!#>" #\$!QR"#\$!Q" eC(C"D26,C"Ffu0("U\$JIU>"#\$!Q"YF"#\#!Q\N>"9,"JT!\$C"

 $\begin{array}{l} F/262909"B96"9"6,9,),+",B9,"1+<@9*+6"96"0) \\ @"90-"<@9)6+",B9,"@2:2,6"@29]2@2,-"]96+1"\\ /0"20,+0,2/09@";9) \\ @,"/*"3*/66";9) \\ @,"/*";/*"=B-62<9@"20V)*-C"(++>"F9C"'2MC"'/1+"%*,C"'45%C) \\ &\#\$Qj" \\ &;,96G+"11+$?%P&&9";;69$K3"'',#$L,) \\ & M'' \\ &M'' \\ &M''$

#C 00,+0,2/09@E/*,6"901"?*9)1)@+0,"'/01)<,"

00",B+"G/*16"/;"/0+"</)*,>"

*B"9"&*9+(*"*\$*B*<59*;*\#*\$'(*1*\$?\\$83+(+*1*53\$!2443+*"*;\$*A*&*,\"P'CDC"'9\C\"A)\"-"S\$>"#\$!Q" #\$!Q" eC(C"D26,C"Ffu0("!\$NIN\>"==C"NSTNNj"#\$!Q"YF"SIJ!N\Ij"*K66*)\$!5:*"*,-\$*F"*,\$ *!"9?+1";\$?\\$/16*\$!5:*"*\$!-;,*"**;\$*X*!*P*#\$'(*1*"P#\$!#R"#\$J"'9\C\==CQ,B"!!!U>"!#\j" *H35*(*I"*(<*"*+*#\$;2495#"#!I"'9\C"\==C"S1"9,"=C"!QI!g!QISC""

 $\begin{array}{l} 00"9"<96+"GB+*+",B+"02:2,9,2/0"/;"029]202,-"=*/M262/06"]9**+1"</06+[)+0,290"19:93+6"\\ 901"02:2,+1"*+</M+*-",/"b,B+",/,90"9:/)0,"=921>c",B+"i/*,B+*0"D26,*2<,"/;"\\ '902;/*029"B+01"bq'90C"'2M20"'/1+r"6+<,2/0"!\\U"*+01+*6",B+"qr"02:2,9,2/0"/;"\\ 029]202,-")0+0;/*<+9]0+",/",B+"+_,+0,"2,"G/)01"206)09,+"D+;+0190,";*/:"20,+0,2/090"\\ ,/*,"029]202,-Cc" \end{array}$

#\$##"%& ' "()*+,-"./01203"4"5267"89093+:+0," '/0;+*+0<+" ./02,9"(=*2036>"?@/*219"

SC $\underline{\&^*/66"i+3@23+0<+"89-"5+01+*"90"FXF"H*/M262/0"} e 0+0;/*<+9]@+"$

#S"

 $</00+<,2/0"G2,B"</06,*)<,2/0"</0,*9<,60"E/":97+"2,":/*+"*+9@26,2<"G+"911",/",B+" +_9:=@+",B*++"9112,2/09@";9<,6^"P!R"</:=+,203"=920,"</:=902+6"G+*+"0/,"9M92@9]@+",/"1/",B+"G/*7")0,2@"/0+"-+9*"9;,+*",+*:209,2/0>"901"P#R",B+"1+@9-"*+6)@,+1"20",B+"$

#\$##"%& '"()*+,-"./01203"4"5267"89093+:+0," '/0;+*+0<+" ./02,9"(=*2036>"?@/*219" #Q"

$$\begin{split} & \text{EB+6+"6,9,+"02<+06203"6,9,),+6}^{<} : |20+1"G2,B"'902;/*029"'2M20"'/1+"6+<,2/0"! \setminus U" \\ &= *+<0) 1203"90"FXF"=*/M262/0";*/:"]+203"+0;/*<+1"2,",B+"FXF"=*/M262/0"</0;02<,6" \\ & \text{G2,B}',B+*"6,9,),+6"1+6<*2 |203"200+390"9<,2/06>"G/)01"6++:",''</:=0+,+0="0+39,+" \\ & 90-"=*/,+<,2/0"/,B+*G26+"9M9209]0+",/"9"</0,*9<,/*"GB/":23B,"<B//6+",/"9]901/0"9" \\ & \text{V/}]>";920",/"=*/M21+"=*/=+*":90=/G+*>";920",/"</:=0+,+"2,";/*",B+"=*2<+>"/*";920",/" \\ & </**+<,"70/G0"0/0T</0;/*:203"G/*7"/*"</1+"M2/09,2/06"+M+0"2;",B+"</0,*9<,/*" \\ & \text{G+}*+"</:=0+,+0-")=T;*/0,"901"B/0+6,"9]/),"2,"9,"9",2:+"GB+0",B+"/G0+*"</0,*9<,/*" \\ & \text{G+}*+"</:=0+,+0-")=T;*/0,"901"B/0+6,"9]/),"2,"9,"9",2:+"GB+0",B+"/G0+*"</0,*9<,+" \\ & \text{G+}*+"</:=0+,+0-")=T;*/0,"901"B/0+6,"9]/0,"2,"9,"9",2:+"GB+0",B+"/G0+*"</0,*9<,+" \\ & \text{G+}*+"</-:=0+,+0-")=T;*/0,"901"B/0+6,"9]/0,"2,"9,"9",2:+"GB+0",B+"/G0+*"</0,*9<,+" \\ & \text{G+}*+"</-:=0+,+0-")=T;*/0,"901"B/0+6,"9]/0,"2,"9,"9",2:+"GB+0",B+"/G0+*"</0,*9<,+" \\ & \text{G+}*+"</-:=0+,+0-")=T;*/0,"901"B/0+6,"9]/0,"2,"0,"902:/*029"20"60</br>$$

'900".)60"4"H*/;0"k"I!!J0"?920)*+",/"=*/6+<),+"G/*7"12023+0,0-"

'90C".)6C"4"H*/;C"k"I!!SC"?920)*+",/"</ :=0+,+"=*/V+<,";/*" </0,*9<,"=*2<+"

P2O<() 12O3"])2012O3"</1+6R"

'9@C".)6C"4"H*/;C"k"I!!\$C"D26*+39*1"/*"M2/@9,2/0"/;"6,9,),+6"

'9@C".)6C"4"H*/;C"k"I!\$JC"D+=9*,)*+";*/:"9<<+=,+1",*91+" 6,9019*16j"D+=9*,)*+";*/:"=@906"/*"6=+<2;2<9,2/06"

'90C".)6C"4"H*/;C"k"I!\$IC"%]901/0:+0,"/;"</0,*9<,C"

fM+0"G2,B/),"</0<+90:+0,"20M/0M+1>")01+*"'902;/*029"'/0,*9<,/*6"(,9,+"F2<+06203" 09G6>",B+";/00/G203"9*+")009G;)0^"

 $\begin{array}{l} \mathsf{B9,",B+2*"} < / 06+[) + 0,290"19:93+6"*+6)0,+1";*/:"1+;+0190,d6";*9)1)0+0," \\ < / 0<+90:+0,"/;",B+"206,900:+0,"/;";9)0,-"<9]0+0""" \end{array}$

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