





O"% . 1%, \*'-#2\*\$\*'3")\*/ ,%)#/'

!

\$%1!A4+-: +21!7/661A1!+2!B>D!54/E&-1'!+, !/, 6&, 1!/4&1, 2+2&/, !2/!2%1!A4+-: +21!'2: -1, 2'!

%225'LYYA4+-/4&1, 2+2&/, )01, , 1'+C)1-: Y!!

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3,4\*""56\*712)/86'

=/; 5: 214!>7&1, 71!(%)\*)!54/A4+; !%/; 15+A1L %225'LYCCCC)01, , 1'+C)1-: Y-1A411'P

54/A4+; 'Y-/72/4+6P-1A411'Y7/; 5: 214P' 7&1, 71)5%5

! 4+-: +21!G-; &'&/, 'L!%225'LYCCCC)01, , 1'+C)1-: Y+-; &'&/, 'YA4+-: +21Y&, -1<)5%5!

! 4+-: +21!=/661A1!'2: -1, 2!5/42+6!%225'LYYA4+-: +21)01, , 1'+C)1-: Y'2: -1, 2P41'/: 471'Y

! 4+-: +21!7+2+6/AL!%225'LYY7+2+6/A)01, , 1'+C)1-: Y&, -1<)5%5!

! 4+-: +21!7/661A1!3/4; 'L!%225'LYYA4+-: +21)01, , 1'+C)1-: Y3/4; 'Y'2: -1, 2P3/4; ')5%5

! 4+-: +21!C4&2&, A!54/A4+; L!%225'LYYC4&2&, A71, 214)01, , 1'+C)1-: YAC5Y&, -1<)5%5

V33&71!/3!2%1!41A&'24+4L!%225'LYY41A&'24+4)01, , 1'+C)1-: Y

B1, , 1'+C!>2+21!D, &E14'&2F!'2: -1, 2!5/42+6!%225'LYCCCC)01, , 1'+C)1-: Y7: 441, 2P

'2: -1, 2'Y

(+40&, A!+, -!24+, '5/42+2&/, L!%225'LYCCCC)01, , 1'+C)1-: Y5+40&, AY!

>2: -1, 2!%1+62%!&, ': 4+, 71L!%225'LYY41A&'24+4)01, , 1'+C)1-: Y'2: -1, 2P41'/: 471'Y'2: -1, 2P

&, ': 4+, 71)5%5!

=/; ; 1, 71; 1, 2L!%225'LYCCCC)01, , 1'+C)1-: Y7/; ; 1, 71; 1, 2Y!

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0101 2/. 3/\* 4&5-)\$/#67#. (&

01: 1 ; - (-<#7)&. <\*&=>&2?151&\*7&@- ((-)\*A&>7\*7-&B(#C-/)#7D&

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=/, -: 72!&, , /E+2&E1!41'1+47%!54/J172'!2+&6/41-!2/!'2: -1, 2\!  
'517&3&7!54/31''&/, +6!A/+6'8!C%12%14!&, !+7+-1; &+!/4!2%1!+556&1-!41'1+47%!, 11-'!/3!  
&, -: '24F)!

!! +&, !E+6: +. 61!1<5142&'1!&, !+-E+, 71-!+41+'!/3!'2: -F8!&, 76: -&, A!+42&3&7&+6!  
&, 2166&A1, 718!&; ; 14' &E1!217%, /6/A&1'8!7//; 5: 214!+, -!, 12C/40!'17: 4&2F8!

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81012/.3/\*4&E+4#(#)7/\*7#. (&  
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:;<;<; !"# \$"%&'()\*"+,#"  
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:101E+4#)#. (&, -F"#/-4-(7)&

=;<;<; @1%27)+%,)#/6'%/.'A2\$)B)2),?'

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\$%1!54/A4+; !7/; ; &211!7/, '&-14'!'1E14+6!3+72/4'!C%1, !; +0&, A!+-; &' '&/, '!-17&' &/, '8!  
&, 76: -&, A!+7+-1; &7!5143/4; +, 71!+2!54&/4!&, '2&: 2&/, '8!' 2+21; 1, 2!/3!5: 45/' 18!+, -!612214'!  
/3!417/; ; 1, -+2&/, )!

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=;<=> 9. .),)#/%2'D\*E1)"\* &\*/ ,6'7#"F/ ,\*" /%,)#/%2'G,1. \*/ ,6'

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!(61+' 1!7%170!+-; &'&/, '!419: &41; 1, 2'!+. /E1!+, -!7/, ': 6!2%1!C1. '821!/3!  
| 4+-: +21!G-; &'&/, '!?%225'LYCCCC)01, , 1'+C)1-: Y+-; &'&/, 'YA4+-: +21Y&, -1<)5%5@3/4!  
+--82&/, +6!419: &41; 1, 2'!

!

!K, 214, +2&/, +6!+556&7+, 2'!+41!+6' /!419: &41-!2!/54/E&- 1!+, !/33&7&+6!  
1E+6: +2&/, !/3!+66!3/41&A, !24+, '74&52' !5143/4; 1-!. F!+!B>DP+554/E1-!+A1, 7F)!(61+' 1!

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34/; !+! CC E!+2!B>D)!G66!7/; ; &2211!; 1; . 14'!; : '2!. 1!A4+-: +21!3+7: 62F!  
; 1; . 14'!+2!B>D!+, -!&, !21, : 41-!/4!21, : 41P24+70!5/' &2&/, ')!  
!

H; : <; ( )66\*" , %) # / '9. K)6#""

!

\$%1!\*&' '142+2&/, !G-E&' /4!' 14E1' !+'!2%1!=%+&4!/3!+'! 2: -1, 2\!' \* &' '142+2&/, !=/; ; &2211!+, -!  
-&4172!'! 2: -1, 2\!' 41' 1+47%/ /, !+!-+FP2/P-+F!. + '&')!\$/!. 1!+' \* &' '142+2&/, !G-E&' /48!+!3+7: 62F!  
; 1; . 14!; : '2!; 112!' 1E14+6!419: &41; 1, 2'8!' /; 1! /3!C%&7%!+41!!

!

W1!+(4/A4+; !b+7: 62F!3/4! =>!(%)\*)!(4/A4+; )!

×: ' 2!%/6-!+!(%)\*)!&, !=/; 5: 214!>7&1, 71!/4!76/' 16F!416+21-!3&16-)!!

×: ' 2!. 1!+!21, : 41-!/4!21, : 41P24+70! ==>T!3+7: 62F!; 1; . 14!C&2%!3: 66!A4+-: +21!

3+7: 62F!' 2+2: ')!  
!

!

\$%1!\*&' '142+2&/, !G-E&' /4!%+'!2%411!; +&, !41' 5/, ' &. &&2&1' !!A: &-&, A!2%1!' 2: -1, 2\!' /E14+66!

41' 1+47%!-&4172&/, 8!54/E&-&, A!-+FP. FP-+F!+-E&' &, A!2/!2%1!' 2: -1, 28!+, -11, ': 4&, A!2%1!

'2: -1, 2!&'!; +0&, A!2&; 16F!54/A41''!2/C+4-'!7/; 5612&, A!2%4/. 545 (2&)-0. 5 (,) -0. 4(A)0. 3(!)25&91 (226)mB.T40

CDEF, 'G'\$

I 1N1 9\*0. /&9#G-)7. (-)&

\$%1!3/66/C&, A!2&; 16&, 1!1<76: -1'!>: ; ; 14!>1; 1'214')!  
!

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!

K-1, 2&3&7+2&/, !/3!21, 2+2&E1! -&' '142+2&/, !+-E&' /4!	"<'! '1; 1'214!&, !2%1!54/A4+; !
*152%!T<+; !=/; ; &2211!3/4; +2&/, !	j &2%&, !2C/!C110'!/3!2%1!'2+42!/3!#:'!'1; 1'214!&, ! 2%1!54/A4+; !
=/; 541%1, '&E1!T<+; &, +2&/, ! 7/; 5612&/, !	W13/41!7/; 5612&, A!"R!741-&2!%/: 4'!#:'!'1; 1'214@ &, !2%1!54/A4+; !



I1P1=\* (+#+\*\$D&Q&2. )7&2/. 6. )\*6&5--(-)-&

D5/, !': 771''3: 66F!7/; 5612&/, !/3!(4/5/' +6!\*131, '1!+'2: -1, 2!&!7/, '&-141-!+!7+, -&-+21!3/4!  
(%\*)!&, !=/; 5: 214!>7&1, 71!+2!B>D)!\$/!; +01!2%&'!/33&7&68!+'2: -1, 2!; : '2!&, &2&+21!+, -!' : . ; &2!



## N101 VC-/C#-A&

\$%1! =>!(%)\*)!54/A4+; !+2!B>D!&!%&A%6F!7/; 512&2&E18!. /2%!3/4!+-; &'&/, !+'!C166!+'!3/4!  
3: , -&, A)!G-; &221-!'2: -1, 2'!C%/!419: 1'2!3: , -&, A!; +F!. 1!16&A&. 61!3/4!+! 4+-: +21!Z1'1+47%!  
G' '&'2+, 2'%&5!?! ZG@/4!+! 4+-: +21!\$1+7%&, A!G' '&'2+, 2'%&5!?! \$G@!b: , -1-!'2: -1, 2'!4171&E1!  
' : 55/42!&, !2%1!3/4; !/3!+! 4+-: +21!G' '&'2+, 2!+55/&, 2; 1, 2!+, -!+!2: &2&/, !C+&E14)!b: , -&, A!&'!  
+E+&+. 61!34/; !; : 62&561!' /: 471')!(4/'5172&E1!(%)\*)!'2: -1, 2'!+41!1, 7/: 4+A1-!2/!41+7%!/: 2!2/!

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!

P;: ::; OD9'D\*6C#/6)B)2,)\*6'

!

I ZG!41'5/, '& &2&1'!E+4F!A41+26F!+, -!; +F!&, 76: -18!. : 2!, /2!6& &21-!2/L!  
W1&, A!+. 61!2/!54/2/2F51Y&; 561; 1, 2!; /-16'!3/4!54/. 61; !' /6E&, A!  
=/, -: 7&, A!6&214+2: 41!41E&1C'!/4!6&. 4+4F!41'1+47%!  
(415+4&, A!; +214&+6'!3/4!' : . ; &' '&/, !2/!3: , -&, A!+A1, 7&1'!+, -!3/: , -+2&/, '!  
j 4&2&, A!415/42'!+, -Y/4!5+514'!

!

K, !/4-14!3/4!+!2: -1, 2!2/!+79: &41!2%1&4!(%)\*!-1A4118!2%1F!; : '2!5+42&7&5+21!&, !2%1!  
41'1+47%!54/71''!)!b: 42%14; /418!+!'2: -1, 2!C/40&, A!+'!+!I 4+-: +21!Z1'1+47%!G''&'2+, 2!&'!  
+6' /!+, !1; 56/F11!C%/!%165'!2%1!+-E&' /4!+, -!%&'!41'1+47%!A4/: 5!; 112!2%1!54/J172!  
419: &41; 1, 2'!2%+2!; +F!%+E!1!<214, +6!'2+01%/6-14')!>/; 12&; 1'8!+'!+, !1; 56/F118!F/: 4!  
'12!/3!-: 2&1'!; +F!, /2!-&41726F!+6&A, !C&2%!F/: 4!1-: 7+2&/, +6!A/+6'!+, -!41'1+47%!  
&, 2141'2'Y/. J172&E1')!!  
!

!)')' %&"1+23\$%4"+50, 6+"7%#0+8' /#1, 09

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Z1'5172!

Z1'5172!+'!+!514' /, 8!'2: -1, 28!+, -!1; 56/F11!  
Z17/A, &2&/, !+, -!41'5172!3/4!-&33141, 71'!&, !7: 62: 418!12%, &7&2F8!A1, -148!+, -! /2%14!  
-&; 1, '&/, '!/3!-&E14' &2F!  
= /; ; &2; 1, 2!/3!2&; 18!133/428!+, -!3&, +, 7&+6!' : 55/42!+ -E&'&, A!/, 6F!+'!; +, F!  
'2: -1, 2'!+'!41' /: 471'!514; &2@  
G66/C&, A!2%1!'2: -1, 2!2/!7//; ; : , &7+21!+, -!1<541''!7/, 714, '!C&2%/: 2!2%1!31+4!/3!  
4124&. : 2&/, )!  
D, -14'2+, -&, A!/3!'2: -1, 2\!7//; ; &2; 1, 2'!2/!7//: 4'1C/40!+, -!I ZG!  
41'5/, '&. &&2&1')!

!

V51, !+, -!761+4!7//; ; : , &7+2&/, '!

X: 2: +66F!+A411-! : 5/, !1<5172+2&/, '!3/4!'2: -1, 2\!7/66+. /4+2&/, !C&2%!/2%14!  
3+7: 62F8!'2: -1, 2'!/4!21+; '!  
X: 2: +66F!+A411-! : 5/, !1<5172+2&/, '!3/4!3419: 1, 7F!+, -!3/4; +2!/3!7//; ; : , &7+2&/, !  
=61+4!7//; ; : , &7+2&/, !+. /: 2!54/J172!2&; 16&, 1'8!+E+&6+. &&2F!+, -!, +2: 41!/3!3: , -&, A8!  
61E16!/3!133/42!+, -!41'1+47%!1<5172+2&/, '!  
\$&; 16F!41E&1C!+, -!311-. +70!/, !'2: -1, 2\!41'1+47%!+, -!+7+-1; &7!54/A41''!  
d/2&3&7+2&/, !/3!+, -!+554/54&+21!41' /6: 2&/, !/3!&' : 1'!2%+2!+4&'1!C&2%&, !2%1!  
54/A4+; 8!. 1!2%1F!+7+-1; &78!41'1+47%!8!3&, +, 7&+6!/4!&, 214514' /, +6!&, !, +2: 41)!

!

I : &-+, 71!/, !41'1+47%!+, -!-1A411!7//; 5612&/, !

I : &-+, 71!/, !56+, , &, A!+, -!; +, +A&, A!41'1+47%!54/J172'!34//; !7/, 7152&/, !2/!  
5: . 6&7+2&/, !

!

!

I : &-+, 71!/, !7+4114!

G-E&71!/, !+-E+, 7&, A!54/31''&/, +6!A/+6'!&, !2%1!-&4172&/, !; /' 2!-1'&41-!. F!2%1!  
&, -&E&-#!A&&#' -

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I C D G A

\$%1! =>!(%\*)! \$G!7//; 1'!C&2%!+8!  
!"#\$%&' 8!+, -!+!  
(\*\*+)##, &+- . #/%0!



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(61+'1!41314!2/!2%1!A4+-: +21!7+2+6/A!/3!2%1!214; !F/: !C141!+-; &221-!&, !3/4!7/: 4' 1C/40!  
419: &41; 1, 2'!  
[%225'LY7+2+6/A\)01,, 1'+C\)1-: Y541E&1Cn54/A4+; \)5%5o7+2/&-p\["m5/&-pN##Sm412: 4, 2/pM\[""!!](#)

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P101W(7-/(?)#6)&

!  
=>!(%\*)!'2: -1, 2'!+41!419: &41-!2/!2+01![P741-&2!%/: 4'!/3!&, 214, '%&5!+'!+!5+42!/3!2%1&4!(%\*)!  
'2: -F)!\$%1' 1!; +F!. 1!419: 1'21-!+'!>T!NcRS!! 4+-: +21!K, 214, '%&5!/4!\*>!cNOO!\* /72/4+6!  
K, 214, '%&5)!>2: -1, 2'!C+, 2&, A!2/!2+01!&, 214, '%&5'!3/4!741-&2!+41!419: &41-!2/!/. 2+&, !54&/4!  
+554/E+6!34/; !2%1!G==!+, -!2%1!(4/A4+; !\* &4172/4)!

!  
>2: -1, 2!; : '2!': .; &2!2%1!3/66/C&, A8!+2!61+'2!+!; /, 2%! . 13/41!2%1!'2+42!/3!2%1!' 1; 1' 214!&, !  
C%&7!2%1!'2: -1, 2!C&'%1'!2/!2+01!2%1!&, 214, '%&58!2/!2%1!(4/A4+; !\* &4172/4)!

!  
") =/5F!/3!2%1!&, 214, '%&5!/3314!612214!2%+2!&, 76: -1' 8!  
+) \$%1!, :; . 14!/3!%/: 4'!C/401-!+, -!2&; 1P514&/-!/3!2%1!&, 214, '%&5)!  
. ) q/. !-1'74&52&/, !+, -!41'5/, '&. &6&2&1')!  
#) a/: 4!-&4172!' : 514E&' /4!+, -!7/; 5+, F!, +; 1!C&2%!7/, 2+72!&, 3/4; +2&/,



1E+6: +2&/, !C&66!2+01!56+71!&, !G54&6YX+F)!\$%1!161; 1, 2'!/3!2%1!1E+6: +2&/, !&, 76: -1!2%1!  
3/66/C&, AL!!

!

" ) =: 441, 2!24+, '74&52!

#) G, !: 5-+21-! =: 44&7: 6: ; !e&2+1!?=e@!

S) G!(4/A41''!Z15/42!?-12+&&'!. 16/C@!

M) I ZGYI \$G!1E+6: +2&/, '!34/; !': 514E&' /4!

Q) TE&-1, 71!/3!+, F!>2: -1, 2! =/, - : 72!+, -!G7+-1; &7!K, 21A4&2F!E&/6+2&/, ')!!

!

\$%1!-1+-6&, 1'!+41!+, , /: , 71-!+2!2%1! 2+42!/3!2%1! 1; 1'214!&, !C%&7%!F/: 4!+, , : +6!41E&1C!&'!  
-: 1)!

!

T;: ;<; 9//1%2!'#\$"\*66'D\*C#',

!

!(4/A41''!Z15/42!34/; !'2: -1, 2!&, 76: -1'!+!/, 1P

5+A1!4136172&E1!, +44+2&E1!C4&221, !. F!2%1!'2: -1, 2!-&'7: ''&, A!%&'Y%14!+7%&1E1; 1, 2'!+, -!  
54/A41''!/E14!2%1!6+'2!F1+4)!!

!

!K2!'%+66!&, 76: -18!

+) Z1'1+47%!3/7: 'Y\*&' 142+2&/, !2/5&7!

.) >517&3&7!2&; 16&, 1!3/4!+7%&1E&, A!; +J/4!; &61'2/, 1'!?)A)8!7/; 5612&, A!7/: 4'1'8!2+0&, A!  
7/; 5'8!-131, -&, A!2%1!54/5/' +68!' : . ; &22&, A!541'1, 2+2&/, '!+, -!5+514'@!

7) (/21, 2&+6!7+4114!5+2%Y>215'!2+01, !2/C+4-!54/31''&/, +6!A/+6'!

-) >517&3&7!7/, 24&. : 2&/, '!; +-1!2/!2%1!(%\*)!54/A4+; !

1) f1+4, &, A!+77/; 56&'%; 1, 2'Y/: 27/; 1'!

!

T+7%!': . P' 172&/, !/3!2%1!415/42!'%/: 6-!. 1!, /!; /41!2%+, !#QO!C/4-'!&, !61, A2%)!!\$%1!415/42'!  
C&66!. 1!'%+41-!C&2%!2%1!G==!C%/!C&66!41E&1C!2%1!54/A41''!415/42')!!

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W13/41!7%//'&, A!+!, 1C!+-E&' /48!+'2: -1, 2!; : '2!0115!&, !; &, -!2%+2!1E14F!3+7: 62F!; 1; . 148!  
-: 1!2/!-&33141, 2!7&47: ; '2+, 71'8!&, !2%1!=/661A1!; +F!\_\_\_!. 1!16&A&. 61!/4!+E+&6+. 61!2/!+-E&' 1!+!  
(%\*)!'2: -1, 2)!\$%1413/418!2%1!'2: -1, 2!; : '2!7/, ': 62!C&2%!2%1!(4/A4+; !\*&4172/4!/, !%/C!2/!  
-1214; &, 1!16&A&. 61!+-E&' /4')!>1E14+6!3+72/4'!A/!&, 2/!-1214; &, &, A!2%1!16&A&. &&2F!6&' 2!+, -!

