



#2/789;/0@!1:!K/;612;/2! ! ! ! ! ! ! !!!!!BCDLMBCDJ!  
"H32684419N!#2/789;/0@!1:!K/;612;/2!"144818;!32. !#2/789;/0@!1:!K/;612;/2M%0082;/12!

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OJ/M\$!, ('!#\$%M/(&L&8)30!P2\$#%, <!)H\$!, J, '\$G&W\*!.&(&J&,\*!/: )#\$, JH\*!, ('!, 'G&(8%)#, )&2\$!.: (J)&/(%!/.!  
)</!%), )\$<&' \$!H&EH\$#!\$' : J, )&/(!&(%)&): )&/(%R!1\!+/--\$E\$%!\$(J/GM, %%\$' !@B!)</A3\$, #!J/--\$E\$%!  
)H#/: EH/: )!\ 8%J/(&R!1\A4V)\$(&(!&J-: '\$' !+/( )&(: &(E!4' : J, )&/(\*!P: )#\$, JH!, ('!4AD\$, #(&(E\*!  
+ /M\$#, )&2\$!4V)\$(&(!& 8&8&/(!/.!4 )#\$M#\$( \$: #H&M!, ('!4J/(G&W! \$2\$-/MG\$ )\*\ 8%J/(&(!": L-W!  
], ' &/\*!\ 8%J/(&(!": L-W!U\$-\$2&8&/(\*!Y(%): J)&/(-!+/GG: (&J, )&/(%!03%)\$G%!, ('!4V)\$(&(!+/(. \$#\$(J\$!  
+\$ )\$#%^, --!%), )\$<&' \$R!!UH\$!J/GL&(\$' !&(%)&): )&/(%!\$GM-/3\$' !6\*699!., J: -)3!, ('!%), ..!, ('!H, '!, (!  
, ((, -!/M\$#, )&(E!L: ' E\$)!/.!SB79!G&-&/ (R!  
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#2/789;/0@!1:!"34/:192/3!\*3203!"95S! ! ! ! ! ! ! BCCC!E!BCCR!  
Q/68!(91?1;0!32. !, 832N!#2/789;/0@!%0082;/12!32. !\*5PP89!\*8;;/12!TBCCB!E!BCCRU!  
, 832N!#2/789;/0@!%0082;/12!32. !\*5PP89!\*8;;/12!TBCCC!E!BCCDU!

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OJ/M\$!, ('!#\$%M/(&L&&)30!=J, '\$G&J\*!.&(, (J&, -!/M\$#, )&/ (, -!/ : )#\$, JH!, ('!' \$2\$-/MG\$(!)! : (J)&/ (%!/.!, (!  
, J, '\$G&J!: (&!<&)H&(!)H\$!1 (&2\$#%&)3!/.!+, -&./#(&, !O, () , !+#: \*\_!./J: %\$' !&(1O&&J/(!X, --\$3\*!%\$#2&(E!L\$)<\$\$(!  
7\*999!d!@9\*999!M, #)A)&G\$!%): '\$()!M\$#!3\$, #R!O: GG\$#!O\$%&&/(!: (&!M#/2&' \$' !#\$E: -, #'! \$E#\$!J#\$' &!)  
J/: #%\$%!./#!G, )#&J: -, )\$' !%): '\$()!M\$/(!J, GM: %R!D, #E\$%)!, ((: , -!%\$-.A%: MM/#)!L: ' E\$)!./#!J/GL&(\$' !: (&!)  
<, %!S67!G&-&/ (R!" , #)!/.!%\$ (&/#!G, (, E\$G\$(!)\$, G!./#!1 +!O, () , !+#: \_R!

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W\$3!, JJ/GM-%HG\$(%)0!4 (H, (J\$' !/: )#\$, JH!)/!O&&J/(!X, --\$3!&(' : %)##\$%c!' \$2\$-/M\$' !#\$-, )&/ (%H&M%<&)H!  
J, GM: %!., J: -)3c!&(J#\$, %\$' !%: GG\$#!%\$%&&/(!\$(#/--G\$(%)c!/2\$#%, <!%&E (&.&J, ()/#E, (&\_ , )&/ (, -!  
)#, (%./#G, )&/(!\$./#)#!' : \$!)/!G, [/#!)\$JH(-/E3!&(' : %) #3!' /<(): #(!/!1699@R!

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#2/789;/0@!1:!"34/:192/3!\*32!V9326;/61! ! ! ! ! ! ! DWWC!E!BCCC!  
- ; /; 0320!, 832N!%. 5630/1234!\*5FF190!\*89?/68;N!\*6H114!1:!, 820;/09@!TDWWX!E!BCCCU!  
, /986019N!%. 5630/1234!\*5FF190!\*89?/68;!TDWWL!E!DWWXU!  
- ; /; 0320!, /986019N!" 120/25/21!%. 5630/12!TDWWB!E!DWWLU!  
<323!8P820!\*89?/68;!):/689N!" 120/25/21!%. 5630/12N!\*6H114!1

) 0H89!0836H/2I!F1;/0/12;!  
\*3203!"4393!#2/?89;/0@! !

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DWJL!MDWJZ



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#2/789;/0@1:!"34/:192/3!\*@;08P!

6998!d!) \*(! !!+/( )&(: &(E!4' : J, )&/ (!/.!)H\$!5, #!F/2\$#(&(E!+/GG&))\$\$\*!+H, &#!

6999!d!) \*(!!!!! !!1 (&2\$#%&&)3!4V)\$(%&/ (!+/: (J&!/.! \$, (%!

699>!d!69@9! !!4' : J, )&/ (!, (' !+: ##&J: -: G!\ /#TE#/: M\*!1+!+/GG&%&&/ (!/ (!)H\$!K: ): # \$!

"3PF5; !

69@6! ! !!P(-&(\$!D\$, #(&(E!4V\$J: )&2\$!+/GG&))\$\$!

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699N!d!) \*(! !!+/: (J&!/.!"#/. \$%&&/ (, -!0JH// -! \$, (%!

699N!d!) \*(' !!0\$(, )\$!+/GG&))\$\$!/(!+/( )&(: &(E!, (' !+/GG: (&)3!4' : J, )&/ (! \$VA/..&J&/a!

69@9! ! !!

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5&-!g!F\$-(',!f,)\$%!K/: (' ,)&/(!  
`"#&(J&M, -!Y(2\$%)&E, )/#a! ! ! ! !!!!!!!S!@R8>!G&-&/ (! ! 69@?!  
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+H, (E\$!, (' !Y((/2, )&/ (!D, L!  
D: G&(, !K/: (' ,)&/(!  
`"#&(J&M, -!Y(2\$%)&E, )/#a! ! ! ! !!!!!!!S?99\*999! ! 69@B!  
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R!=G\$#&J, (!+/: (J&!/(!4' : J, )&/(!, (' !5-, JTL/, #' R!

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0, (' \$\$ (\*!+R!`69@?aR!+/GM\$)\$ (J3A5, %\$' !4' : J, )&(!%b/!)H\$!b\$<!j FPP+Rk! \*!K, --!  
69@?\*!MR!69A66R!

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4' : J, )&/(R! R!=G\$#&J, (!+/: (J&!/(!4' : J, )&/(R!

0, (' \$\$ (\*!+!\*\$' R!`69@?aR!O&E(, -%!, (' !OH&amp. )%&(!)H\$!"/%)%\$J/( ' , #3!D, (' %J, M\$R!

0, (' \$\$(\*!+R!`699>aR!!Y)0%!b/)!4, %3!5\$&(E!f#\$\$ (0!f#\$\$ (!F, #T\$)&(E!, (' !4(2&#/(G\$(), -!+/(%: G\$#%G!&(!  
+/( )&(: &(E!; &EH\$#!4' : J, )&/ (R! CB\*!>BA@@BR!

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J/( )&(: &(E!H&EH\$#!\$' : J, )&/ (m! C6\*!@@AB@R!

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F, T\$!+/--\$E\$!F /#\$! =../#' , L-\$!./#10): ' \$(%)!, (' !K, G&&\$%mk!=%/J&,) &/(!/!": L-!J!, (' !D, (' Af#, ( )!  
1 (&2\$#%&)&\$%!, ( (: , -!G\$\$)&(E\*!\ , %H&(E)/(!! +R!

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/(!4' : J, )&/ (!, ( (: , -!G\$\$)&(E\*!\ , %H&(E)/(!! +R!

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; &EH\$#!4' : J, )&/ (kR!"-\$ (, #3!, ' ' #\$\$%R!D\$, # (&(E!&(!, !! &E&), -!\ /#-' 0!69@?!"4' : J, )&/ (!D\$, ' \$H&M!  
+/(. \$\$ (J\$R!=G\$#&J, (!!"3JH/-/E&J, -!=%/J&,) &/(\*!\ , %H&(E)/( \*! +R!

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%M\$, T\$#i ., J&&), )/#R!D\$, ' \$H&M!Y(%&): )\$!69@?R!1 (&2\$#%&)&3!/.!b/#)H!+, #/-&(, !, )!f#\$\$ (%L/#/\*!  
f#\$\$ (%L/#/\*!b+R!

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Y(%)#: J)&/ (!, (' !U\$JH(/-/E3\*!Y)H, J, \*!beR!

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U#, (% , )-, )&!OJ&\$ (J\$!\ \$ \$T!%M/(%/#\$' !L3!)H\$!b/#<\$E&, (!F &(&)%#3!/!.!4' : J, )&/(!, (' !]\$\$\$, #JHR!  
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''/-&J&\$%R!'' , (\$-!M#\$\$(\$ , )&/(!, )!\ /G\$(!&(!F/2\$#(G\$(!]\$-, )&/(%!4' : J, )&/(!U, %T!K/#J\$R!\ , %H&(E)/( \*!  
!+R!

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0, (' \$\$(\*!+R!`69@B\*!O\$M)\$GL\$aR!+H, (E\$\*!h: , -&)3\*!OJ, -\$0!UH\$!4' : J, )&/(Y((/2, )&/(!D, (' %J, M\$R!  
''#\$\$(\$ , )&/(!, )!)H\$!5/ , #' !/.!U#: )\$\$%!.!)H\$!1 (&2\$#%&)&3!/!.!F , %, JH: %\$))%!(03%)\$GR!=GH\$#%)\*!F =R!

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M#\$\$(\$ , )&/(!, )!)H\$!69@B!W&JT/..!/.!)H\$!1 (&2\$#%&)&3!/!.!\ %J/(%&(!F , ' %&/(!4' : J, )&/(Y((/2, )&/(!  
Y(&)&)&2\$R!F , ' %&/( \*!\ YR!

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J/(2\$(&(Ei#\$)\$, )!/.!)H\$!+/: (J&!/.!])\$E&/ (, !=JJ#\$' &)&(E!+/GG&&&/ (%R!5%/)/ (\*!F =R!  
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G\$\$)&(E!/.!)H\$!b\$)</#T!./#!+H, (E\$!, (' !+/( )&( : /: %!Y((/2, )&/(R!Y(' &, (, M/-&&\*!YbR!  
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1 (&2\$#%&)&3!03%)\$G!/.!F\$/#E&, !=' : -)!D\$, #(&(E!+/(%/#)&: G!O: GG\$#!Y(%&): )\$R!O, 2, ((, H\*!F\$/#E&, R!  
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0, (' \$\$(\*!+R!`69@B\*!o: (\$aR!] %&\$!/.!)H\$!F PP+%!K/#\$%H, ' /<&(E!)H\$!+/G&(E!U#, (%./#G, )&/(!/.!; &EH\$#!

0, (' \$\$(\*!+R!`69@B\*!F, #JHaR!b\$<!'' ,)H<, 3%!. /#!F#, ' : , )\$!4' : J, )&/ (!, (' !D&.\$- / (E!D\$, # (&(E0! ] \$)H&(T&(E!  
! \$E#\$\$\$, (' !+)\$&.&J, )\$%, (' !4(2&%%/ (&(E!b\$<!+##\$' \$ (&, -%R!!''#\$\$\$( ), )&/ (!, )!, !< /#T%H/M!M/ (%/#\$' !L3!  
)H\$!1 (&2\$#%&)3! / .!Y-&(/&%%, )!1#L, (, A+H, GM, &E(!, (' !)H\$!b, )&/ (, -!OJ&\$ (J\$!K/: (' , )&/ (R!1#L, (, A  
+H, GM, &E(\*!Y-&(/&%%R!  
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0, (' \$\$(\*!+R!`69@B\*!F, #JHaR!] /, ' G, M!)/! =), &(G\$ (R!''#\$\$\$( ), )&/ (!, )!)H\$! =G\$#&J, (!+ /: (J&! / (!  
4' : J, )&/ (!, ((: , -!G\$\$)&(ER!\ , %H&(E) / (\*!I +R!!  
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''#\$\$\$( ), )&/ (!, )!)H\$! =%/J&, )&/ (! / .! =G\$#&J, (!1 (&2\$#%&)&\$%!' = =1a!+ /: (J&! / (!K\$' \$#, -!] \$-, )&/ (%!, ((: , -!  
J / (.##\$ (J\$R!b\$<!P#-\$, (%^!D /: &%%, (, R!  
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0, (' \$\$(\*!+R!`69@6\*!F, #JHaR!X&\$<!./G!)H\$!' #\$\$%' \$ (&, -!O: &)\$0!UH /: EH)%!, L /: )!D\$, ' \$H&M\*!+H, (E\$\*!, (' !  
] %&-&\$ (J\$R!!''#\$\$\$( ), )&/ (!, )!)H\$!1 (&2\$#%&)3!''# / . \$%&&/ (, -!+ / ()&( : &(E!4' : J, )&/ (! =%/J&, )&/ (!, ((: , -!  
G\$\$)&(E\*!''/#)-, (' \*!P#\$E / (R!  
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0, (' \$\$(\*!+R!\*!K-\$G&(E\*!+R\*!; , (J/JT\*!F R\*!OG: )\_ \*! \ R!`@9@6\*!F, #JHaR!O)#, )\$E&J!'' , #) (\$#H&M%0!Y(( /2, )&/ (!  
)H# /: EH!P: )%&' \$!P#E, (&\_ )&/ (%R!'' , (\$-!M#\$\$\$( ), )&/ (!, )!)H\$!1 (&2\$#%&)3!''# / . \$%&&/ (, -!+ / ()&( : &(E!  
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D\$, ' \$H&M!Y(%&): )\$!699>A69@9R!1 +D =!OJH / -! / .! ! \$ ( )&#3\*!D / %! = (E\$-\$\*!+, -& / # (&, R!  
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1 (&2\$#%&)3!+ / ()&( : &(E!4' : J, )&/ (! =%/J&, )&/ (!, ((: , -!G\$\$)&(E\*!O, (!K#, (J&J / \*!+, -& / # (&, R!  
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0, (' \$\$ (\*!+R!`69@>\*!=: E: %)aR!; /<!)/!UH#&2\$!&(!)H\$!K, J\$!/.!5: ' E\$)!+: )%0!5#/ , ' \$ (&(E!=JJ\$%!)/!; &EH\$#!  
4' : J, )&/ (R!UH\$!42/---: )&/ (R!H))M%i\$2/---: )&/ (R/J/GiG, (, E&(EA&(%&): )&/ (iH&EH\$#n\$' nL: %&(\$%iH/<A)/A  
)H#&2\$A&(A)H\$A., J\$A/ .AL: ' E\$)AJ: )%AL#/ , ' \$ (&(EA, JJ\$%A)/AH&EH\$#A\$' : J, )&/ (i!  
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0, (' \$\$