D B D F R

"+3.-,!D%/\$, .!9- π !J)-,!.2#!&'!.#\$*!),!"#(C!b!\$3!.2#!"-%#(.)%!)?! A#8#%\$7!B#7\$.-),3!?)%!.2#!&,-:#%3-./!)?!'7\$3G\$!Q/3.#*!\$,8!9- π !E#!E\$3#8!-,! σ \$32-,4.),0!"C>C!92#%#!2#!9- π !9)%C!(7)3#7/!9-.2!)+%!4):#%,*#,.!%#7\$.-),3!.#\$*!),!(%.-(\$7!?#8#%\$7!-33+#3!-,(7+8-,4!#??)%.3!.)!-,(%#\$3#!)+%7\$,8!4%\$,.0!?#8#%\$7!-,:#3.*#,.!\$.!&'0!\$,8!%#3#\$%(2F%#7\$.#8!6%-)%.-#3C!!P#; π 1!\$73)!?)(+3!),!\$!:\$%#./!)?!?#8#%\$7!#8+(\$.-),!6)7-(/!-33+#3C

"+3.-,!()*#3!.)!&'!9-.2!*)%#!.2\$,!Vb!/#\$%3!)?!6+E7-(!6)7-(/!\$,8!4):#%,*#,.!%#7\$.-),3!
#<6#%#,(#C!D%\\$,.!*)3.!%#(#,.7/!3#%:#8!\$3!.2#!'33-3.\$,.!"-%#(.)%!)?!A#8#%\$7!B#7\$.-),3!?)%!.2#!
1#<\$3!'YH!&,-:#%3-./!Q/3.#*!-,!C\$32-,4.),0!">C!A)%!*)%#!.2\$,!VV!/#\$%30!D%/\$,.!%#6%#3#,.#8!
.2#!'YH!Q/3.#*;3!VV!(\$*6+3#3!\$,8!3#:#,!3.\$.#!\$4#,(-#3!E#?)%#!>),4%#330!.2#!Z<#(+.-:#!D%\$,(2!\$,8!3.\$G#2)78#%!()**+,-.-#3C!5,!.2-3!%)7#0!2#!):#%3\$9!,+*#%)+3!6)7-(/!\$%#\$3!.2\$.!-*6\$(.#8!.2#!#8+(\$.-),0!%#3#\$%(20!#<.#,3-),0!\$,8!6+E7-(!3#%:-(#!*-33-),3!)?!.2#!'YH!Q/3.#*!\$,8!\$33-3.#8!
(\$*6+3!\#8#%32-60!\\$(+7./0!3.\$??0!3.+8#,.3!\$,8!).2#%3!E/!8#:#7)6-,4!#??#(.-:#!\$8:)(\$(/!3.\\$.#4-#3!?)%.\$\%4#.#8!6\%)%.-#3C!

I%)%.)!%#6%#3#, .-, 4!.2#!' YH!Q/3.#*0!D%/\$, .!3#%: #8!-, !.2#!c \$32-, 4.), 0!" C>C!\$, 8!1#<\$3!)??-(#3!?)%! &CQC!>), 4%#33*\$, !B+Ed, !P-,)J)3\$0!?)%*#%!