Name _Solutions

1. Convert the following odds to probabilities:
A. 56 to 95
B. 7 to 13
$56 /(56+95)=56 / 151$
$7 /(7+13)=7 / 20$
C. 40 to 11
D. $\quad 19$ to 3
$40 /(40+11)=40 / 51$
$19 /(19+3)=19 / 22$
2. Convert the following probabilities to odds:
A. $3 / 5$
B. $19 / 34$
3 to $(5-3) \rightarrow 3$ to 2
19 to $(34-19) \rightarrow 19$ to 15
C. 0.123
D. $\quad 0.87$
$0.123=123 / 1000123$ to $(123-1000) \rightarrow 123$ to $877 \quad 0.87=87 / 10087$ to 13
3. If the odds of winning a game are 9 to 7 , what is the probability of losing the game?

The odds of losing are 7 to 9 , so the probability of losing is $7 /(9+7)=7 / 16$.

Or, The proability of winning is $7 /(7+9)=7 / 16$. The probability of losing is $1-7 / 16=9 / 16$.

