## Compound Events

Find each probability. Show your work!

1. You are about to attack a dragon in a role playing game. You will throw two dice, one numbered 1 to 9 and the other with the letters A through G. What is the probability that you will roll a 2 and an H ?
2. The game show contestant spins a spinner with the letters A through $H$ on it, then either an easy or hard question is picked randomly for her. What is the probability that the spinner will not stop on the letter F and she is given a hard question?
3. Your drawer contains 10 red socks and 9 blue socks. It's too dark to see which are which, but you grab two anyway. What is the probability that both socks are blue?
4. A shuffled deck of cards is placed face-down on the table. It contains four hearts, six diamonds, two clubs and three spades. What is the probability that the top two cards are one of the clubs followed by one of the diamonds?
5. The game of backgammon uses two standard dice, each with the numbers one through six. You need to roll double $4 s$ to win the game. What is the probability you will get that result on your next roll?
6. A bowl of fruit is on the table. It contains five apples, six oranges, and two bananas. Ethan and Adam come home from school and randomly grab one fruit each. What is the probability that Ethan grabs an orange and Adam grabs an apple?

## Answers:

1. $1 / 63=1.6 \%$
2. $7 / 16=44 \%$
3. $4 / 19=21 \%$
4. $2 / 35=5.7 \%$
5. $1 / 36=2.8 \%$
6. $5 / 26=19 \%$
