# M8-11.1-Probability of Independent Events HW 

What is the probability of drawing a queen from a deck of cards?

What is the probability of getting tails from flipping a coin?

What is the probability of rolling a six-sided die and getting a two?

What is the probability of randomly drawing a red marble from a bag 3 red marbles and 2 blue marbles?

What is the sample space of flipping a coin?

What is the sample space of taking a marble out of a bag of red marbles and blue marbles?

## M8-11.1-Probability HW

1. Anakin flips a coin four times. Fill in the tree diagram for each possible outcome.
a. What is the probability he gets heads four times in a row?
b. What is the probability that he rolls two heads and two tails in any order?

2. Luke has two standard six-sided dice. One die is light and the other is dark.
a. When he rolls both die, what is the probability of rolling a sum greater than 8 ?
b. What is the probability that the number on the light die is greater than the number on the dark die?
c. What is the probability that the sum of the numbers is less than 10 ?

Light Die

|  | 1 | 2 | 3 | 4 | 5 | 6 | $P($ sum $>8)=$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  | $P(L>D)=$ |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  | $P($ sum $<10)=$ |
| 6 |  |  |  |  |  |  |  |

# M8-11.1-Probability of Independent Events HW 

## Calculating probabilities

Probability $=\frac{\# \text { of sucessful outcomes }}{\# \text { total outcomes }}$

What is the probability of choosing a queen from a deck of cards?

What is the probability of choosing a card from a deck that is less than a 5 ?

What is the probability of winning a raffle if you purchased 3 tickets and a total of 90 tickets were sold?

What is the probability of choosing a red marble from a bag with 6 blue, 4 red and 2 yellow marbles?

## Calculating probabilities of independent events.

What is the probability of getting two heads if two coins are tossed?

What is the probability of choosing a spade from a deck of cards and rolling a 3 on a die?

What is the probability of flipping a tail on a coin and choosing the ace of diamonds from a deck of cards?

## M8-11.1-Probability of Dependent Events HW

There is a bag of marbles containing $\mathbf{1 2}$ blue, $\mathbf{7}$ red, 1 yellow and $\mathbf{4}$ green.

What is the probability of choosing 2 blue marbles in a row?

What is the probability of choosing a green marble and then a red marble?

What is the probability of choosing a blue marble and then the yellow marble?

What is the probability of choosing two spades in a row from a deck of cards?

What is the probability of choosing two queens in a row from a deck of cards?

What is the probability of choosing two face cards (J, $\mathrm{Q}, \mathrm{K}, \mathrm{A}$ ) in a row?

