

#### Writing Experimental Probabilities

Identifies and counts the desired outcomes in a probability experiment

Tossing two heads

Trial	Outcome
1	T, T
2	H, H
3	T, T
4	H, H
5	T, T
6	T, T
7	H, T
8	H, H
9	T, H

The outcome H, H occurred 3 times.

Represents a probability as a fraction

As a fraction, the experimental probability of H, H is three out of nine, or  $\frac{3}{9}$ .

Converts a fraction to a decimal

$\frac{3}{9}$  is the same as  $\frac{1}{3}$ , which is 0.333...  
As a decimal, the experimental probability of H, H is approximately 0.333 or 0. $\bar{3}$ .

Expresses a probability as a percent, and a ratio

$\frac{1}{3} = 0.333\dots \approx 33\% \approx 1:3$

As a percent, the experimental probability of H, H is approximately 33%.

As a ratio, the experimental probability of H, H is 3:9 = 1:3.

#### Observations/Documentation