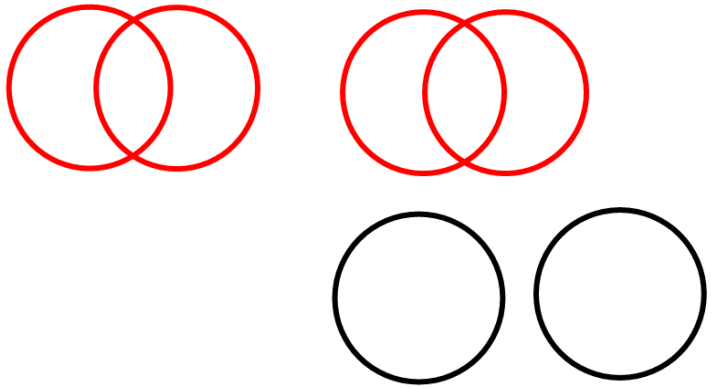
A compound event



Probability of overlapping events:

Probability of disjoint events:

Is the event mutually exclusive?

$$P(A) = \frac{2}{5} \quad P(B) = \frac{7}{20} \quad P(A \text{ or } B) = \frac{3}{4}$$

Is the event mutually exclusive?

$$P(A) = \frac{1}{2} \quad P(B) = \frac{1}{2} \quad P(A \text{ or } B) = \frac{3}{4}$$

A and B are mutually exclusive.

$$P(A) = \frac{9}{20} \quad P(A \text{ or } B) = \frac{9}{10} \quad P(B) = ?$$

A and B are mutually exclusive.

$$P(A) = \frac{1}{4} \quad P(B) = \frac{11}{20} \quad P(A \text{ or } B) = ?$$

A and B are not mutually exclusive.

$$P(A) = \frac{3}{10} \quad P(B) = \frac{11}{20} \quad P(A \text{ and } B) = \frac{33}{200} \quad P(A \text{ or } B) = ?$$