

Mutually Exclusive Events

Find the probability.

- 1) A cooler contains ten bottles of sports drink: four lemon-lime flavored, three orange flavored, and three fruit-punch flavored. You randomly grab a bottle. It is a lemon-lime or an orange.

$$\frac{7}{10} = 0.7$$

- 3) A box of chocolates contains six milk chocolates and six dark chocolates. Four of the milk chocolates and three of the dark chocolates have peanuts inside. You randomly select and eat a chocolate. It is a milk chocolate or has peanuts inside.

$$\frac{3}{4} = 0.75$$

- 5) A jar contains eight balls, numbered from one to eight. You randomly pick a ball. It is numbered one or eight.

$$\frac{1}{4} = 0.25$$

- 7) A bag contains five yellow jerseys numbered one to five. The bag also contains six purple jerseys numbered one to six. You randomly pick a jersey. It is purple or has an even number.

$$\frac{8}{11} \approx 0.727$$

- 9) You roll a fair six-sided die. The die shows an even number or a number less than four.

$$\frac{5}{6} \approx 0.833$$

- 2) A spinner has an equal chance of landing on each of its seven numbered regions. After spinning, it lands in region one or two.

$$\frac{2}{7} \approx 0.286$$

- 4) A bag contains five yellow tickets numbered one to five. The bag also contains five green tickets numbered one to five. You randomly pick a ticket. It is yellow or has a number less than two.

$$\frac{3}{5} = 0.6$$

- 6) There are seven nickels and four dimes in your pocket. Three of the nickels and one of the dimes are Canadian. The others are US currency. You randomly select a coin from your pocket. It is a nickel or is US currency.

$$\frac{10}{11} \approx 0.909$$

- 8) You roll a fair six-sided die. The die shows an even number or a number greater than one.

$$\frac{5}{6} \approx 0.833$$

- 10) A box contains six red playing cards numbered one to six. The box also contains four black playing cards numbered one to four. You randomly pick a playing card. It is black or has a number less than two.

$$\frac{1}{2} = 0.5$$