

8.3 - Skills Check

Determine if the scenario is mutually exclusive or overlapping.

- 1) You roll a fair six-sided die. The die shows an odd number or a number greater than two.
- 2) There are four nickels, five dimes, and four quarters in your pocket. You randomly pick a coin. It is a nickel or a dime.

Find the probability.

- 3) A cooler contains twelve bottles of sports drink: four lemon-lime flavored, five orange flavored, and three fruit-punch flavored. You randomly grab a bottle. It is a lemon-lime or an orange.
- 4) You roll a fair six-sided die. The die shows an odd number or a number greater than three.

Find the number of possible outcomes in the sample space (hint: counting principle).

- 5) A jewelry store sells gold and platinum rings. Each ring is available in nine styles and is fitted with one of eight gemstones.
- 6) A softball player bats five times in a game. Each at-bat results in an out, getting on base, or hitting a home run.