

## Multiplying Probabilities

1. A coin is tossed twice. What is the probability of obtaining two tails?
2. A coin is tossed and a die is rolled. What is the probability of obtaining an even number on the die and a head on the coin?
3. Each question on a six-question multiple choice quiz has 3 incorrect answers and 1 correct answer. If a student guesses on all 6 questions, what is the probability that the student guessed correctly on all six questions?

4. A spinner contains 8 equal regions numbered 1 through 8. If the spinner is spun twice, find the probability of each.
- a) The spinner lands on an even number and then a prime number.
  - b) The spinner lands on the number 4 twice.
5. An urn contains 4 orange marbles and 2 green marbles. A marble is drawn at random and not replaced. A second marble is then drawn from the urn. Find the probability of each.
- a) Both marbles are orange.
  - b) Both marbles are green.
  - c) Both marbles are the same color.