

LESSON 154 Practice

Solve. Show your calculations. Use a calculator if necessary.

1. Emma, Brian, and 6 of their friends are seated randomly in a row of 8 seats.
 - a. What is the probability that Emma sits in the first seat?
 - b. What is the probability that Emma sits in the first seat and Brian in the last seat?
 - c. What is the probability that Emma and Brian sit at each end of the row?
 - d. (Challenge) What is the probability that Emma and Brian sit next to each other?

2. The letters A, E, R, W, and T are rearranged in a random order.
 - a. What is the probability that an arrangement spells WATER?
 - b. What is the probability that an arrangement begins with a vowel?
 - c. What is the probability that an arrangement begins and ends with a vowel?
 - d. (Challenge) What is the probability that no two consonants come together?

3. Three balls are drawn simultaneously from a bag of 3 red, 5 pink, and 4 yellow balls.
 - a. What is the probability of drawing 3 red balls?
 - b. What is the probability of drawing 3 pink balls?
 - c. What is the probability of drawing no yellow balls?
 - d. What is the probability of drawing one ball of each color?

4. Two cards are drawn simultaneously from a deck of 52 cards. Express your answers as a percent to the nearest tenth.
 - a. What is the probability of drawing two clubs?
 - b. What is the probability of drawing no clubs?
 - c. (Challenge) What is the probability of drawing exactly one club?
 - d. (Challenge) What is the probability of drawing at least one club?