

9-5**Practice: Skills****Combinations**

Tell whether each situation represents a *permutation* or *combination*. Then solve the problem.

1. You are allowed to omit two out of 12 questions on a quiz. How many ways can you select the questions to omit?
2. Six students are to be chosen from a class of 18 to represent the class at a math contest. How many ways can the six students be chosen?
3. How many different 5-digit zip codes are possible if no digits are repeated?
4. In a race with six runners, how many ways can the runners finish first, second, or third?
5. How many ways can two names be chosen from 76 in a raffle if only one entry per person is allowed?
6. How many ways can six students be arranged in a lunch line?
7. A family has a bike rack that fits seven bikes but they only have five bikes. How many ways can the bikes fit in the bike rack?
8. How many ways can you select three sheriff deputies from eight candidates?
9. How many ways can four finalists be selected from 50 contestants?
10. How many 4-digit pin numbers are available if no number is repeated?
11. How many handshakes can occur between five people if everyone shakes hands?