

Lesson 7.8 Problem Solving**SHOW YOUR WORK**

Solve each problem. Use either the Fundamental Counting Principle, a tree diagram, or a table to solve each problem. Show your work.

1. Stephen flips a coin and pulls a marble from a bag which contains equal amounts of red, green, yellow, and blue marbles. How many outcomes are possible?

There are _____ possible outcomes.

Which strategy did you use to solve this problem?

2. Julie is playing a game. She has a bag with cards numbered 1–10 and another bag with red and yellow bouncy balls. She pulls a number card out of one bag and a bouncy ball out of another bag. How many outcomes are possible?

There are _____ possible outcomes.

Which strategy did you use to solve this problem?

3. At the sandwich shop, Nick can order a sandwich on a sub roll, wheat bread, or a Kaiser roll. He can have ham, turkey, or roast beef. Then, he can add cheese, lettuce, or pickles. What is the probability that he will have a sandwich that is both on wheat bread and made with ham?

There is a _____ chance of his ordering a sandwich with both wheat bread and ham.

Which strategy did you use to solve this problem?

4. Jeff has a deck of cards and a coin. What is the chance that he will pull a 10 from the deck of cards and land on heads?

There is a _____ chance of Jeff pulling a 10 and flipping heads at the same time?

Which strategy did you use to solve this problem?

1.

2.

3.

4.