

# Practice 4-5

Solve a Simpler Problem

**Solve each problem by solving a simpler problem.**

1. A baseball team has 4 pitchers and 3 catchers. How many different pitcher-catcher combinations are possible? One way to solve this problem is to make a list like the one started below. Finish the list.

P1-C1	P2-C1
P1-C2	P2-C2
_____	_____
_____	_____
_____	_____
_____	_____

2. The baseball team has 2 first basemen, 3 second basemen, and 2 third basemen. How many combinations of the three positions are possible?  
\_\_\_\_\_
3. A quarter is tossed 3 times. In how many different orders can heads and tails be tossed?  
\_\_\_\_\_
4. A quarter is tossed 4 times. In how many different orders can heads and tails be tossed?  
\_\_\_\_\_
5. Curtains are manufactured in 3 different styles and 5 different colors.
  - a. How many different style-color combinations are possible?  
\_\_\_\_\_
  - b. The curtains are produced in 2 different fabrics. How many different style-color-fabric combinations are possible?  
\_\_\_\_\_

All rights reserved.

© Pearson Education, Inc., publishing as Pearson Prentice Hall.