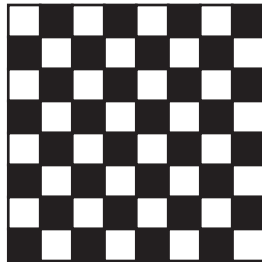# Homework Practice

Problem-Solving Investigation: Solve a Simpler Problem

Mixed Problem Solving

Use the *solve a simpler problem* strategy to solve Exercises 1 and 2.

1. **CHECKERS** A checkerboard has 8 squares on each side. How many squares of different sizes (1-by-1, 2-by-2, etc) are there on a checkboard?

2. **ADDRESSES** The buildings on Daugherty Road are even-numbered from 12 to 136. How many buildings have an address with at least one 4?

Use any strategy to solve Exercises 3–5. Some strategies are shown below.

Problem-Solving Strategies
• Work backward.
• Look for a pattern.
• Choose an operation.

3. **SPORTS** Every 12 times at bat, Simon hits the ball 3 times. About how many times will he hit the ball after 20 times at bat? 40? 84?

4. **NUMBERS** A number is halved. Then three is subtracted from the quotient, and 5 is multiplied by the difference. Finally, 1 is added to the product. If the ending number is 26, what was the beginning number?

5. **TILES** A kitchen is 10 feet long and 8 feet wide. If kitchen floor tiles are $2\frac{1}{2}$ inches by 3 inches, how many tiles are needed for the kitchen?