

# Homework & Practice 6-4

## Solve More Multi-Step Problems

### Another Look!

There are 84 students in the band. The boys and girls are in separate rows. There are 6 students in each row. There are 8 rows of boys. How many rows of girls are there?

You have to answer the hidden questions before you can answer the question that is asked.



### Step 1

**Hidden Question:** How many boys are in the band?

$$8 \times 6 = b$$

$$b = 48$$

There are 48 boys in the band.

### Step 2

**Hidden Question:** How many girls are in the band?

$$84 - 48 = g$$

$$g = 36$$

There are 36 girls in the band.

### Step 3

**Original Question:** How many rows of girls are in the band?

$$36 \div 6 = r$$

$$r = 6$$

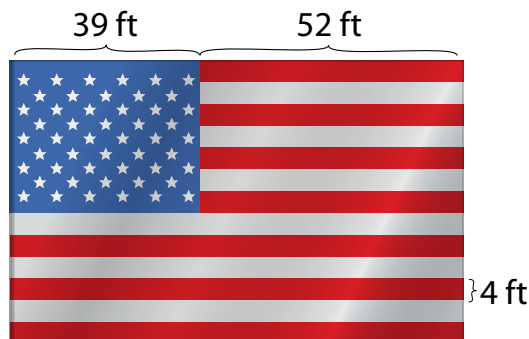
There are 6 rows of girls.

For 1–2, solve each multi-step problem. Write equations to show each step.

- Friday night, a pizza parlor sold 5 large pizzas and some medium pizzas. The pizza parlor made a total of \$291. How many medium pizzas were sold?



- What is the area of the giant American flag shown? All stripes are the same height.



For 3–4, use the table at the right.

3. Emma has \$100 to spend at the pet store. She needs to buy 1 bag of dog food and 2 chew toys. Will Emma have enough money left over to buy 3 times as many catnip toys as chew toys? Explain.



Barky's Pet Store	
Product	Cost
Bag of Dog Food	\$35
Bag of Cat Food	\$18
Chew Toy	\$12
Catnip Toy	\$9

4. **A-Z Vocabulary** Define *partial products*. What partial products can you use to find how much 6 bags of cat food will cost?

5. **Higher Order Thinking** Maurice and Trina both solve the problem at the right. Maurice plans to add first and then multiply. Trina plans to multiply first and then add. Who is correct? Use a property of operations to justify your answer.

A large wind turbine can power 598 homes. A company had 4 turbines and then built 5 more. How many homes can the company power with its wind turbines?

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6. The gym teacher has \$250 to spend on volleyball equipment. She buys 4 volleyball nets for \$28 each. Volleyballs cost \$7 each. How many volleyballs can she buy?

#### Part A

Write and solve an equation that can be used to answer each hidden question.

#### Part B

Write and solve an equation that can be used to answer the original question.