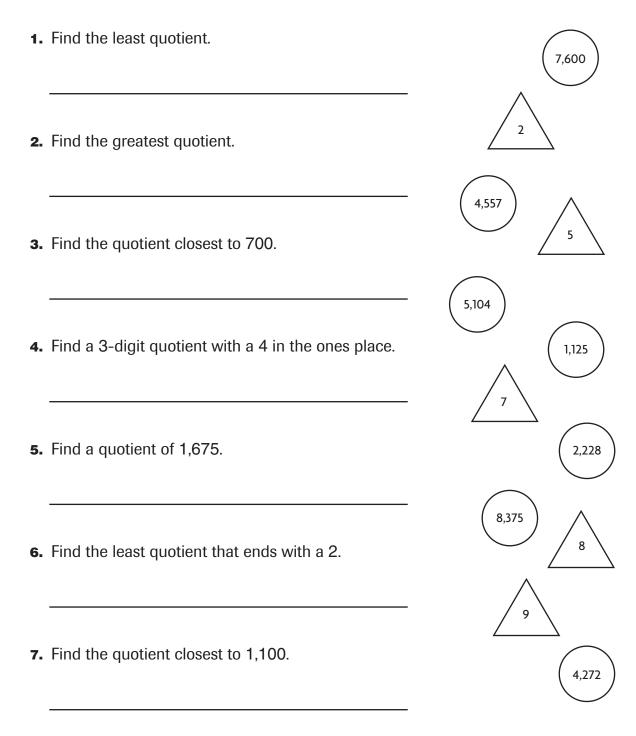
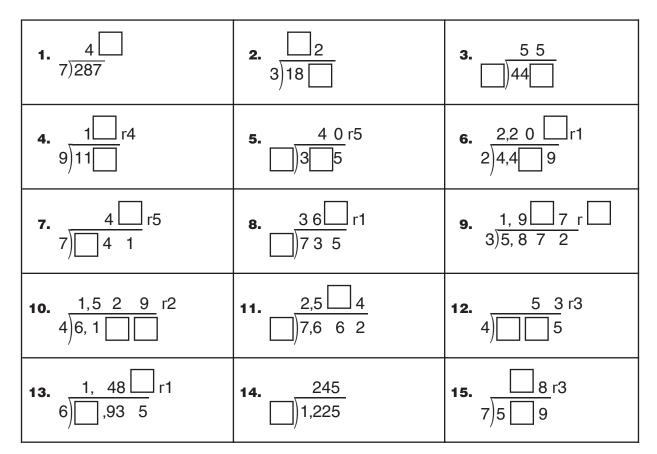
# **Find the Quotient**

Use the clue to write and solve a number sentence for each exercise. Choose the dividend from a number in the circles and the divisor from a number in the triangles. You can use the number in each circle only once, but you can use the number in a triangle more than once. The correct number sentence will not contain a remainder.



# **Division Detective**

For each exercise below, find the unknown number that belongs in each box.

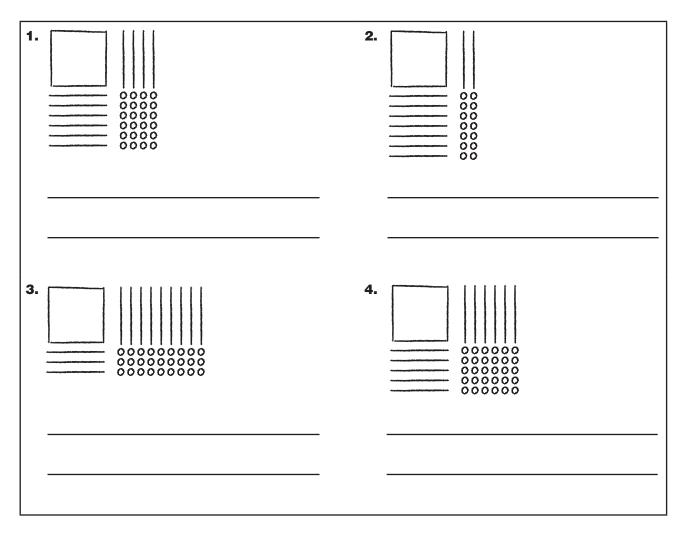


**16.** Write Math **Explain** the strategy you used to solve Exercise 1.

#### **17. Stretch Your Thinking Explain** how you would solve a division problem with an unknown divisor.

# **Dividing It Up**

Write two related division sentences for each quick picture.



**5. Write Math Explain** how you can use multiplication to check that your division sentences for Exercises 1–4 are correct.

# **Partial Quotients Matching**

Each division problem below can be solved using two partial quotients. Match each division problem with two partial quotients and with its answer.

| <b>1.</b> 56)674   | Partial Quotients<br>15 | <b>Answer</b><br>16 r44 |
|--------------------|-------------------------|-------------------------|
|                    |                         |                         |
|                    | 20                      |                         |
| <b>2.</b> 63)1,732 | 10                      | 12 r2                   |
|                    | 5                       |                         |
| <b>3.</b> 37)2,434 | 1                       | 27 r31                  |
|                    | 7                       |                         |
| <b>4.</b> 49)828   | 60                      | 65 r29                  |
|                    | 2                       |                         |

#### **Alphabet Estimation**

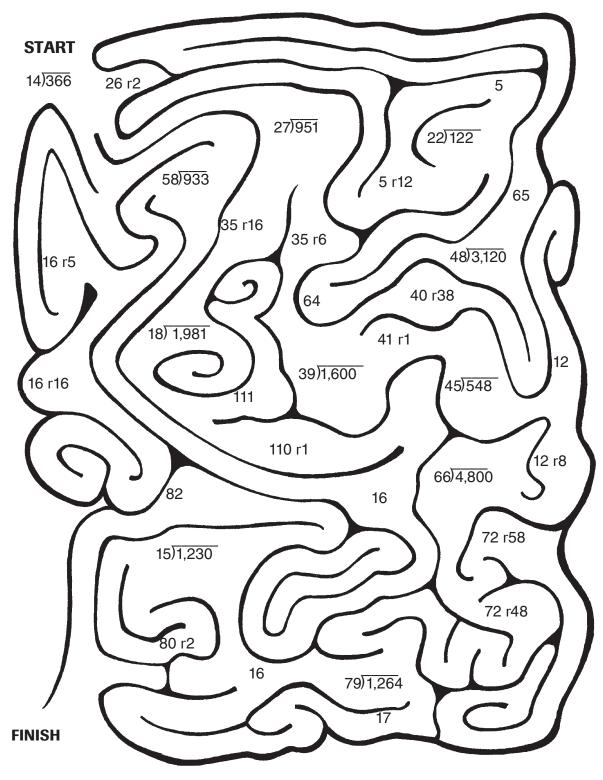
Find two sets of compatible numbers for each problem. Write the letters of your answers on the lines provided.

| 1.  | 87)6,066 | <br>(A) 2,800 ÷ 70 | (Q) 4,000 ÷ 80  |
|-----|----------|--------------------|-----------------|
| 2.  | 74)3,227 | <br>(B) 1,800 ÷ 30 | (R) 3,500 ÷ 70  |
| 3.  | 62)4,635 | <br>(C) 2,400 ÷ 40 | (S) 1,400 ÷ 70  |
| 4.  | 94)7,542 | <br>(D) 1,400 ÷ 20 | (T) 7,200 ÷ 90  |
| 5.  | 44)3,521 | <br>(E) 6,300 ÷ 90 | (U) 3,600 ÷ 40  |
| 6.  | 31)1,929 | <br>(F) 6,400 ÷ 80 | (V) 5,600 ÷ 80  |
| 7.  | 47)3,255 | <br>(G) 4,800 ÷ 80 | (W) 3,600 ÷ 90  |
| 8.  | 75)6,000 | <br>(H) 4,800 ÷ 60 | (X) 4,200 ÷ 60  |
| 9.  | 83)4,300 | <br>(I) 3,000 ÷ 50 | (Y) 1,200 ÷ 20  |
| 10. | 29)1,433 | <br>(J) 2,700 ÷ 90 | (Z) 2,100 ÷ 70  |
| 11. | 19)1,274 | <br>(K) 2,800 ÷ 40 | (AA) 5,600 ÷ 70 |
| 12. | 65)1,681 | <br>(L) 1,500 ÷ 30 | (BB) 5,400 ÷ 90 |
| 13. | 36)2,281 | <br>(M) 8,100 ÷ 90 | (CC) 2,700 ÷ 90 |
| 14. | 92)2,899 | <br>(N) 3,500 ÷ 50 | (DD) 3,200 ÷ 40 |
| 15. | 88)2,000 | <br>(0) 1,200 ÷ 30 | (EE) 1,800 ÷ 90 |
| 16. | 72)5,525 | <br>(P) 2,100 ÷ 30 | (FF) 4,900 ÷ 70 |

- **17. Stretch Your Thinking** Which letters have a quotient of 70? Which letters have a quotient of 80?
- **18.** Write Math Write a division problem that has a 2-digit divisor and estimated quotients of 50 and 60.

# **A-Mazing Division**

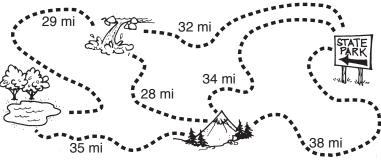
Solve each division problem, beginning at START. Draw a line from the problem to the correct quotient. Continue until you reach FINISH. If you reach a dead end, go back and try again.



#### **Biking Division**

Jeff and Mario spent their summer vacation biking and camping along trails in a nearby state park. Use the map and the table of information below to solve each problem.





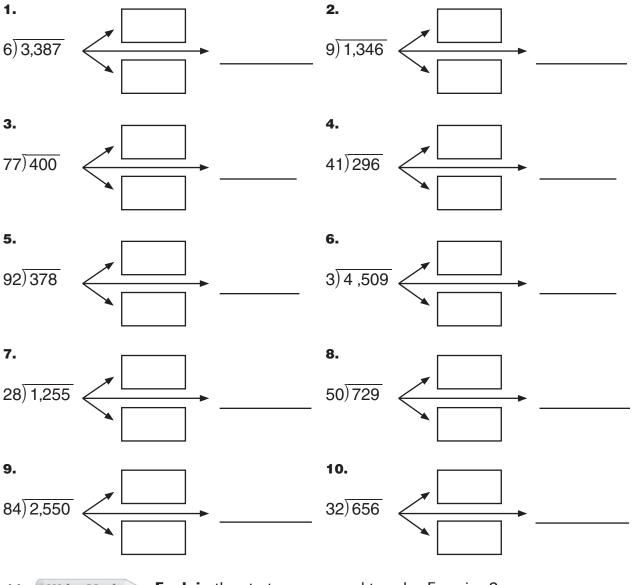
 Mario bikes at a rate of 7 miles per hour. If he takes the longer direct route from the park entrance to the mountain, for how many complete hours will Mario bike?

| Distance, Rate, and Time                                      |                                |  |  |
|---|--------------------------------|--|--|
| Example: Joe drove 140 miles in 2 hours at 70 miles per hour. |                                |  |  |
| $rate \times time = distance$                                 | $70 \times 2 = 140 \text{ mi}$ |  |  |
| distance ÷ time = rate  | $140 \div 2 = 70$ mi per hr    |  |  |
| distance $\div$ rate = time                                   | $140 \div 70 = 2 \text{ hr}$   |  |  |

- 2. If he continues riding at a rate of 7 miles per hour, how many hours will it take Mario to bike from the mountain to the lake along the most direct route?
- **3.** Jeff bikes at a rate of 9 miles per hour. If he bikes the most direct route from the park entrance to the waterfall, about how many hours will Jeff bike?
- **5.** How many total miles does Jeff bike in order to go from the park entrance to the lake using the shortest distance?
- 4. From the waterfall, Jeff then bikes the direct route to the lake. His rate decreases to 8 miles per hour. For how many complete hours will Jeff bike?
- 6. Mario bikes along the most direct route from the lake to the waterfall to meet Jeff. If he bikes 5 miles per hour, about how many hours will he bike?

# **Quotient Correction**

For each problem, find two estimates. Write the higher estimate in the top box and write the lower estimate in the bottom box. Use one estimate to place the first digit. Divide and adjust the quotient as needed. Write your answer on the line provided.



**11.** Write Math **Explain** the strategy you used to solve Exercise 2.

#### **Division Draw**

#### Draw a bar model to solve each problem.

1. Keira, Larry, and Gita picked apples at an orchard. Keira picked twice as many pounds as Larry and 3 times as many pounds as Gita. The total weight of the apples they picked was 8,360 pounds. How many pounds of apples did each person pick?

| Larry |  |
|-------|--|
| · .   |  |

- Gita \_\_\_\_\_
- 2. Mark orders food for a restaurant. He orders 5 times the number of pounds of chicken as he does beef, and he orders 4 times the number of pounds of fish as beef. The total weight of the food he orders is 3,600 pounds. How many pounds of each item does Mark order?

chicken \_\_\_\_\_

beef \_\_\_\_\_

| fish |  |  |
|------|--|--|
|      |  |  |

**3. Write Math** Describe how you used a bar model to solve Problem 1.