Name _____

Extending Division Patterns

Use patterns to find the quotients.

1. 8,500 ÷ 100 = _____

8,500 ÷ 1,000 = _____

8,500 ÷ 10,000 = _____

8,500 ÷ 100,000 = _____

8,500 ÷ 1,000,000 = _____

2. 123,575 ÷ 10^2 = _____

123,575 ÷ 10^3 = _____

123,575 ÷ 10^4 = _____

123,575 ÷ 10^5 = _____

123,575 ÷ 10^6 = _____

3. 5,000 ÷ 2 = _____

5,000 ÷ 20 = _____

5,000 ÷ 200 = _____

5,000 ÷ 2,000 = _____

5,000 ÷ 20,000 = _____

4. 24,000 ÷ 3 = _____

24,000 ÷ 30 = _____

24,000 ÷ 300 = _____

24,000 ÷ 3,000 = _____

5. _____ ÷ 4 = 9

_____ ÷ 4 = 90

_____ ÷ 4 = 900

_____ ÷ 4 = 9,000

_____ ÷ 4 = 90,000

6. 800 ÷ 100 = _____

800 ÷ 10 = _____

800 ÷ 1 = _____

800 ÷ 0.1 = _____

800 ÷ 0.01 = _____

7. Write Math **Explain** how you used patterns to complete Exercise 5.

_____

_____

_____

8. Stretch Your Thinking Suppose you continue the pattern in Exercise 4. What will be the next three quotients?

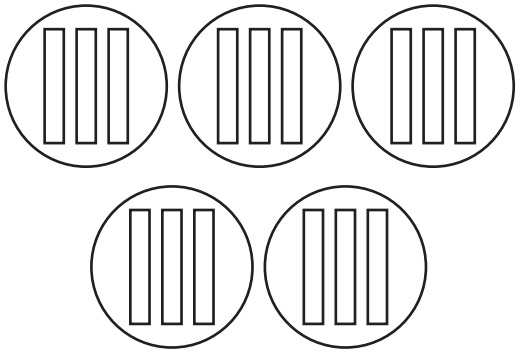
_____

Name _____

Write Division Equations

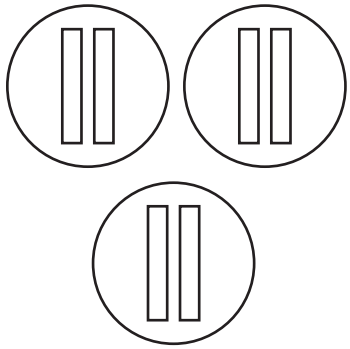
In the models below, a large square represents 1, a bar represents 1 tenth, and a small square represents 1 hundredth. All divisors are whole numbers. Write the division equation each model represents.

1.



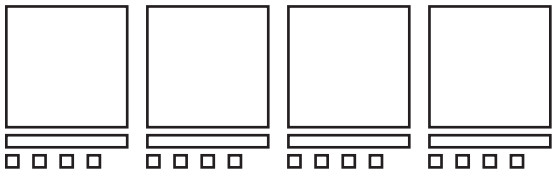
_____

2.



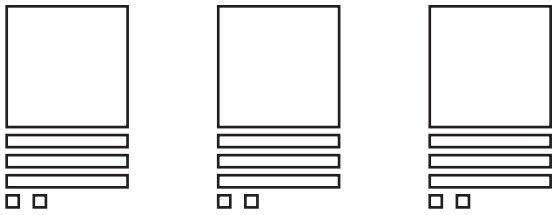
_____

3.



_____

4.



_____

5. Write Math **Explain** how you found the division equation the model in Exercise 1 represents.

_____

_____

_____

_____

_____

Name _____

Compare Estimated Quotients

Estimate each quotient. Then write < or > in the circle to compare each pair of estimates.

1. 76.3 ÷ 8 ◯ 37.5 ÷ 7

2. 3.1 ÷ 4 ◯ 6.4 ÷ 9

3. 654.3 ÷ 82 ◯ 289.5 ÷ 31

4. 98.4 ÷ 4 ◯ 62.8 ÷ 3

5. 276.3 ÷ 9 ◯ 389.4 ÷ 5

6. 329.6 ÷ 7 ◯ 117.5 ÷ 3

7. 8.2 ÷ 12 ◯ 7.3 ÷ 14

8. 726.3 ÷ 18 ◯ 687.5 ÷ 14

9. $46.35 ÷ 3 ◯ $81.35 ÷ 5

10. $7.27 ÷ 13 ◯ $9.08 ÷ 19

11. Write Math Write a pair of decimal division expressions, similar to the ones in Exercises 1–10, so that when you estimate and compare the quotients, you get 9 > 3.

_____

_____

Name _____

Unknown Dividends and Quotients

For each problem, find the quotient for the first box. Then use that quotient as the dividend in the second box. Use the quotient for the second box as the dividend in the third box. Write the final quotient in the last box. The first one has been done for you.

1. 27.84 ÷ 3 = → 9.28 ÷ 2 = → 4.64 ÷ 8 = → 0.58

2. 96.12 ÷ 4 = → _____ ÷ 9 = → _____ ÷ 3 = → _____

3. 86.13 ÷ 11 = → _____ ÷ 3 = → _____ ÷ 9 = → _____

4. 85.02 ÷ 13 = → _____ ÷ 2 = → _____ ÷ 3 = → _____

5. 226.8 ÷ 14 = → _____ ÷ 6 = → _____ ÷ 9 = → _____

6. 117.76 ÷ 8 = → _____ ÷ 4 = → _____ ÷ 4 = → _____

7. 310.5 ÷ 15 = → _____ ÷ 3 = → _____ ÷ 23 = → _____

Name _____

Decimal Division Matching

Match the division expression in Column A with its quotient in Column B. You may find it helpful to use decimal models.

Column A	Column B
1. 1.4 ÷ 0.2	1
2. 0.78 ÷ 0.13	2
3. 1.5 ÷ 0.5	3
4. 2.4 ÷ 0.6	4
5. 1.48 ÷ 0.74	5
6. 0.64 ÷ 0.08	6
7. 2.7 ÷ 0.3	7
8. 0.75 ÷ 0.15	8
9. 1.2 ÷ 1.2	9

10. Stretch Your Thinking One way to divide decimals is to first change the dividend and the divisor to whole numbers. To do so, multiply both the dividend and the divisor by the multiple of 10 that makes the divisor a whole number. Then divide to find the quotient. **Explain** how to use this strategy to find the quotient in Exercise 2.

_____

_____

_____

Name _____

Equal or Not Equal?

Write <, >, or = in the circle to make each statement true.

1. 0.6 ÷ 0.05 ◯ 12

2. 0.72 ÷ 0.08 ◯ 0.9

3. 0.3 ÷ 0.3 ◯ 0.1

4. $0.75 ÷ $0.25 ◯ 0.3

5. 0.42 ÷ 0.06 ◯ 7

6. 0.39 ÷ 0.3 ◯ 0.13

7. 6.93 ÷ 0.3 ◯ 9.24 ÷ 0.4

8. 45 ÷ 9 ◯ 4.5 ÷ 0.09

9. 1.17 ÷ 0.3 ◯ 4.68 ÷ 1.2

10. 8.74 ÷ 1.9 ◯ 55.2 ÷ 1.2

11. Write Math **Explain** how you decided which symbol to write in Exercise 10.

12. **Stretch Your Thinking** Without dividing, tell whether the quotient of 4.45 ÷ 1.5 is *greater than*, *less than*, or *equal to* 3.

Name _____

Which Is the Better Buy?

Divide to find the cost of one unit of each item. Round your answers to the nearest cent. Then determine which item is the better buy.

1. a 6.5-ounce can of tuna for $1.39 or a 3-ounce can of tuna for $0.65

The 6.5-ounce can of tuna costs _____ per ounce.

The 3-ounce can of tuna costs _____ per ounce.

The _____-ounce can of tuna is the better buy.

2. a 2.5-pound bag of sugar for $1.69 or a 4-pound bag of sugar for $2.49

The 2.5-pound of sugar costs _____ per pound.

The 4-pound bag of sugar costs _____ per pound.

The _____-pound bag of sugar is the better buy.

3. a 7.2-ounce box of macaroni for $0.67 or a 13-ounce box of macaroni for $1.28

The 7.2-ounce box of macaroni costs _____ per ounce.

The 13-ounce box of macaroni costs _____ per ounce.

The _____-ounce box of macaroni is the better buy.

4. an 11.5-ounce box of crackers for $2.25 or a 16-ounce box of crackers for $2.99

The 11.5-ounce box of crackers costs _____ per ounce.

The 16-ounce box of crackers costs _____ per ounce.

The _____-ounce box of crackers is the better buy.

Name _____

Money Flow

Solve each problem. Make a flowchart and work backward to help.

1. Madison and Jim paid $21.08 for one large pizza, 2 salads with the same price, and 2 drinks with the same price. The pizza cost $11.70, which was 3 times the cost of one salad. They also used a coupon for $2 off their purchase. What was the cost of one drink?

_____

2. Carla bought a digital camera that cost $91.98. She also bought 2 identical memory cards and a camera case. The camera cost 6 times as much as the case. She paid $127.35, including sales tax of $6.06. What was the cost of each memory card?

_____

3. Lia, Phil, and Cam collect a total of $200.30 for a holiday fundraiser. Phil collects $12.80 more than Lia. Cam collects 3 times as much as Lia. How much does each person collect?

_____

4. While on vacation, Craig bought a pair of sunglasses for $15.98, a hat for $7.99, 5 postcards, and a beach towel. The beach towel cost $0.50 more than half the price of the sunglasses. Craig gave the cashier $40 and got $3.59 in change. Each postcard cost the same. How much did each postcard cost?

_____

5. **Stretch Your Thinking** Draw a flowchart for a money problem similar to the ones in Exercises 1–4. Then write a word problem that can be solved by using your flowchart and working backward.

_____

_____

_____