Fifth Grade

Answer Key
Unit 2: Multiplication

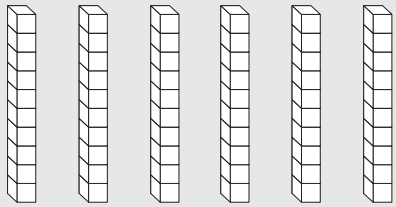
See PDF bookmarks
for navigation

Name _____

Problem of the Day

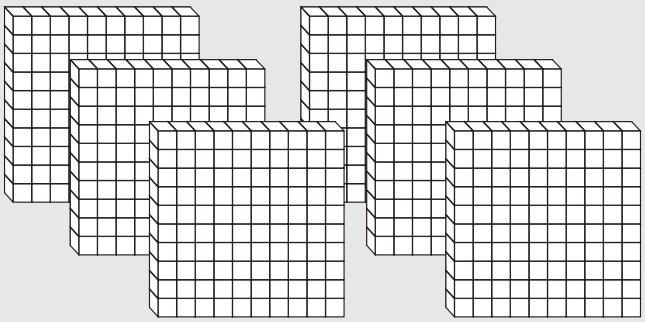
Lesson 1

Write a multiplication equation to represent the blocks.



6 × 10 = 60

Write a multiplication equation to represent the blocks.



6 × 100 = 600

Lesson 2

Find the sums.

10 + 10 + 10 = **30**

100 + 100 + 100 = **300**

1,000 + 1,000 + 1,000 = **3,000**

What patterns do you notice? **Sample answer: Each equation starts with the same number and adds a zero each time.**

Lesson 3

Round 4,579 to the nearest thousand and the nearest hundred.

Nearest thousand: **5,000**

Nearest hundred: **4,600**

Lesson 4

Multiply 45 × 8 using an area model.

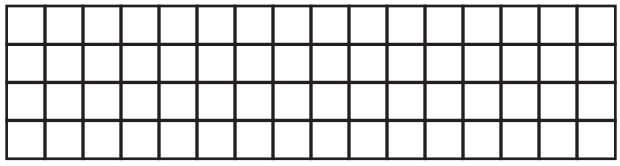
360

Multiply 45 × 8 using the standard algorithm.

360

Lesson 5

Explain how to find the number of square units shown without counting every square.



Sample answer: You can find the area by multiplying length times width.

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Name _____

Problem of the Day

Lesson 6

Find and explain the error in the work shown.

$$\begin{array}{r} 29 \\ \times\ 5 \\ \hline 105 \end{array}$$

Sample answer:The person forgot to add a 4 in the tens place after multiplying 9 × 5.

Lesson 7

Mrs. Taylor wants to put new flooring in her office. Her office is 12 feet long and 8 feet wide. How many square feet of flooring does she need to cover the floor?

96 sq feet

Lesson 8

Multiply.

$$\begin{array}{r} 343 \\ \times\ \ 7 \\ \hline \end{array}$$

2,401

Lesson 9

Complete the strip diagram.

188			
47	47	47	47

Lesson 10

Use the area model to find the product.

	200	+ 30	+ 7
6			

1,237

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Name _____

Problem of the Day

Lesson 11

Multiply.

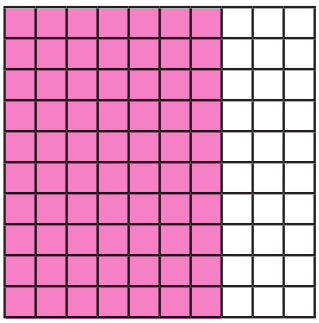
23 × 10
23 × 100
23 × 1,000

What pattern do you notice?

Sample answer: Each equation starts with the same number and adds a zero each time.

Lesson 12

Shade the model to show the decimal 0.7.

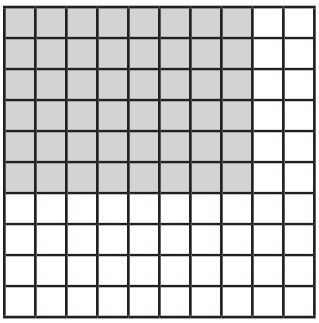


How many hundredths does your model show?

1

Lesson 13

How many squares on the grid are shaded?



Use a decimal to represent the number shown on the grid.

.48

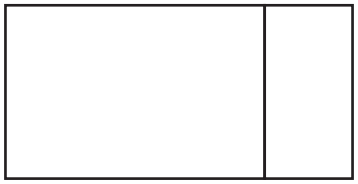
Lesson 14

Which is the best estimate of 326 × 18?

A. 60
B. 3,000
C. 6,000
D. 8,000

Lesson 15

Use an area model to find the product 65 × 7.



455

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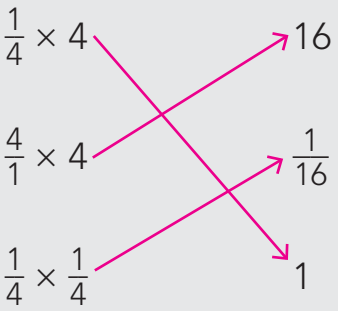
Name _____

Problem of the Day

Lesson 16

Use number sense to match each expression to the product.



Lesson 17

Complete the strip diagram.

5.4		
1.8	1.8	1.8

Write two different equations that represent the diagram.

1.8 + 1.8 + 1.8 = 5.4
1.8 × 3 = 5

Lesson 18

Each eraser in the school store costs $0.50. Complete the table to show the total cost of each number of erasers.

Number of erasers	Total cost
1	$0.50
2	**$1.00**
3	**$1.50**
4	**$2.00**
5	**$2.50**
6	**$3.00**

Lesson 19

Find the sum.

0.4 + 0.4 + 0.4 + 0.4 = **1.6**

Rewrite the equation using multiplication. **4 × 0.4**

Lesson 20

Write the number using expanded notation.

4.6 = **4 × 1 + 6 × 0.1**

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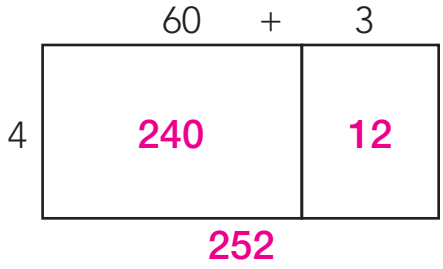
Name _____

Pre-Assessment

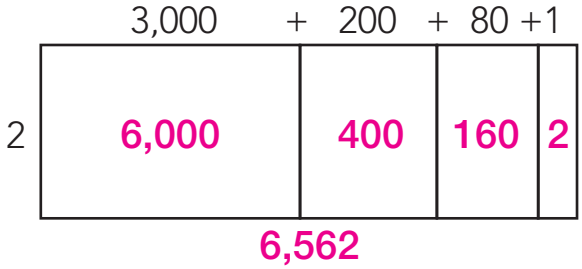
Complete the area models.

1.



252

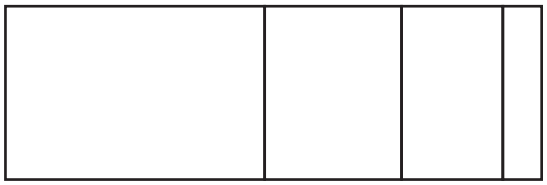
2.



6,562

Use the area models to find the products.

3. 4,753 × 5 **23,765**



4. 64 × 29 **1,856**

Multiply. Show your work.

5.
$$\begin{array}{r} 72 \\ \times\ 46 \\ \hline \end{array}$$
3,312

6.
$$\begin{array}{r} 0.3 \\ \times\ 0.2 \\ \hline \end{array}$$
0.06

7.
$$\begin{array}{r} 6.9 \\ \times\ 3.5 \\ \hline \end{array}$$
24.15

8.
$$\begin{array}{r} 0.15 \\ \times\ 0.8 \\ \hline \end{array}$$
0.12

9. Hala counted 26 seeds in one package of watermelon seeds. If each package has the same number of seeds, how many seeds would Hala have if she buys 13 packages?

338 seeds

10. Eric needs 1.4 yards of fabric for each drawstring bag he is making. How many yards of fabric will he need to buy if he wants to make 5 bags?

7 yards

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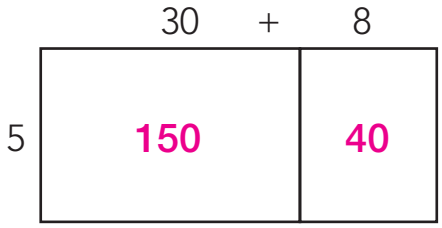
Name _____

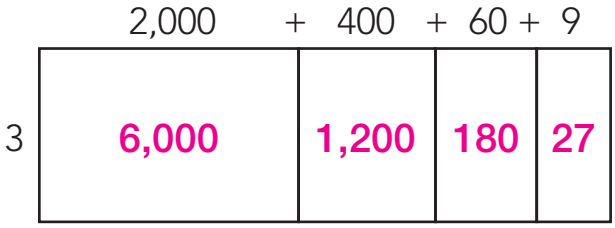
Multiplying Whole Numbers Quiz

Complete the area models.

1.

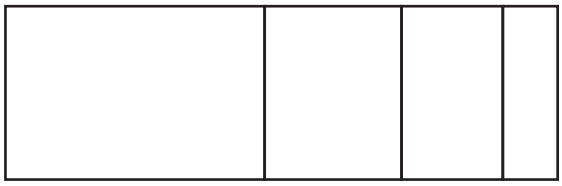


2.



Use the area models to find the products.

3. 4,655 × 2 **9,310**



4. 76 × 43 **3,268**

Multiply. Show your work.

5.
4528
× 3
13,584

6.
79
× 42
3,318

7.
291
× 36
10,476

8.
650
× 84
54,600

9. The school principal bought 24 cases of pencils. Each case has 312 pencils. How many pencils did the principal buy in all?

7,488 pencils

10. Jayla ran one mile. Yasmin ran 4 times as far as Jayla ran. A mile is 5,280 feet long. How many feet did Yasmin run?

21,120 feet

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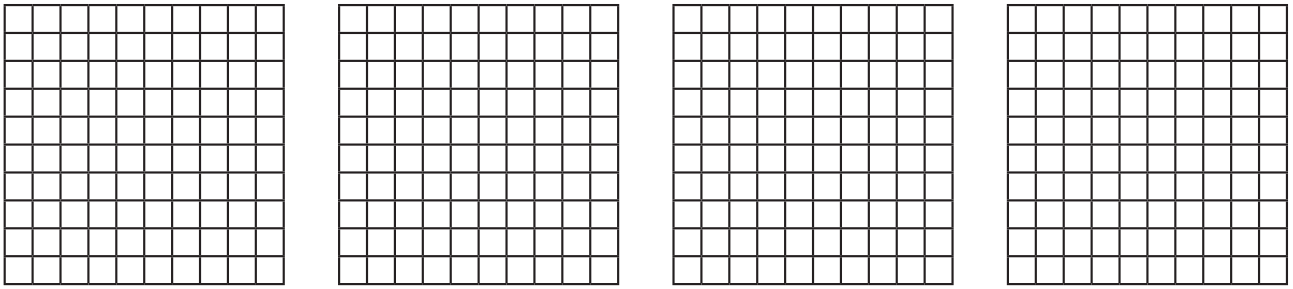
Name _____

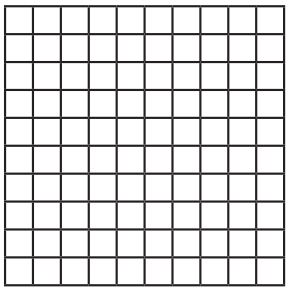
Multiplying Decimals Quiz

Use the grids to find the products.

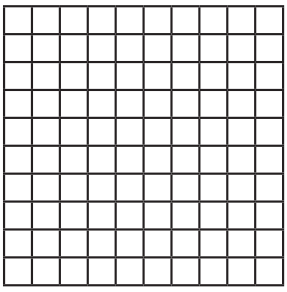
1. $4 \times 0.6 =$ **2.4**



2. $0.8 \times 0.4 =$ **0.32**



3. $0.2 \times 0.6 =$ **0.12**



Use the area models to find the products.

4. $4.5 \times 2.3 =$ **10.35**

5. $1.8 \times 5.2 =$ **9.36**

Multiply.

6.
$$\begin{array}{r} 5.4 \\ \times \quad 3 \\ \hline \end{array}$$
16.2

7.
$$\begin{array}{r} 2.7 \\ \times \quad 0.9 \\ \hline \end{array}$$
2.43

8.
$$\begin{array}{r} 16.5 \\ \times \quad 4.3 \\ \hline \end{array}$$
70.95

9.
$$\begin{array}{r} 0.82 \\ \times \quad 0.4 \\ \hline \end{array}$$
0.328

10. Each section of a fence is 1.9 meters long. What is the total length of 5 sections?

9.5 meters

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Name _____

Assessment

1. Find the products.

$61 \times 100 =$ **6,100** $61 \times 1{,}000 =$ **61,000** $61 \times 10{,}000 =$ **610,000**

Explain how to use the pattern shown above to find the product $61 \times 100{,}000$.

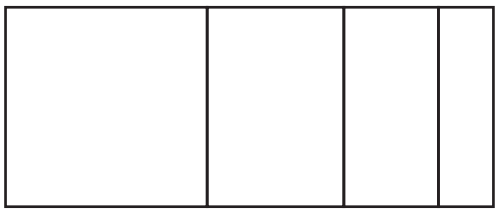
Sample answer: Each time a zero is added to the original factor of 100, you add a zero to the product.

2. Find the product.

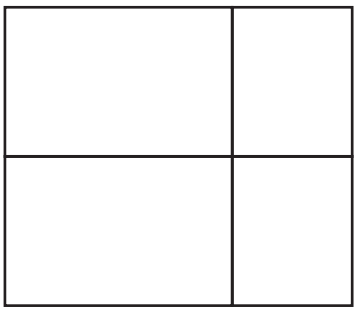
$530 \times 10^4 =$ **5,300,000**

Use the area models to find the products.

3. $2{,}786 \times 3 =$ **8,358**



4. $72 \times 64 =$ **4,608**



Multiply. Show your work.

5.
$$\begin{array}{r} 33 \\ \times\ 29 \\ \hline 957 \end{array}$$

6.
$$\begin{array}{r} 83 \\ \times\ 62 \\ \hline 5{,}146 \end{array}$$

7.
$$\begin{array}{r} 7243 \\ \times\ \ 4 \\ \hline 28{,}972 \end{array}$$

8.
$$\begin{array}{r} 293 \\ \times\ 37 \\ \hline 10{,}841 \end{array}$$

9. Find the products.

$0.68 \times 10 =$ **6.8** $0.68 \times 100 =$ **68** $0.68 \times 1{,}000 =$ **680**

Explain how to use the pattern shown above to find the product $0.68 \times 10{,}000$.

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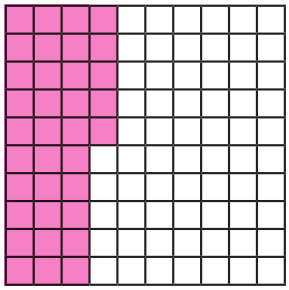
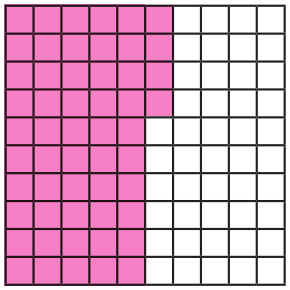
Shade the models to find the products.

10. 0.5 × 0.7 =



11. 0.6 × 0.9 =



Place the decimal point in each product. Add zeros if necessary.

12. 0.27 × 0. 8 = 2 1 6

13. 5.08 × 1.3 = 6.6 0 4

14. 5.3 × 27.4 = 1 4 5.2 2

Multiply. Show your work.

15.
$$\begin{array}{r} 5.4 \\ \times \quad 3 \\ \hline \end{array}$$
16.2

16.
$$\begin{array}{r} 2.7 \\ \times \ 0.9 \\ \hline \end{array}$$
2.43

17.
$$\begin{array}{r} 16.5 \\ \times \ 4.3 \\ \hline \end{array}$$
70.95

18.
$$\begin{array}{r} 0.82 \\ \times \ 0.4 \\ \hline \end{array}$$
0.328

19. A farmer planted 35 rows of corn with 125 plants in each row. How many plants did the farmer plant in all?

4,375 plants

20. A piece of fabric is 2.3 yards long and 1.8 yards wide. What is the area of the piece of fabric in square yards?

4.14 yards

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$$\begin{array}{r} 4{,}249 \\ \times \quad 5 \\ \hline 20{,}000 \end{array}$$

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$$\begin{array}{r} 384 \\ \times \quad 25 \\ \hline \end{array}$$

1,200

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$$\begin{array}{r} 49 \\ \times\ 35 \\ \hline 200 \end{array}$$

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$$\begin{array}{r} 2{,}709 \\ \times \quad 3 \\ \hline 9{,}000 \end{array}$$

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$$\begin{array}{r} 28 \\ \times\ 19 \\ \hline 600 \end{array}$$

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$$\begin{array}{r} 66 \\ \times\ 59 \\ \hline \end{array}$$

4,200

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$$\begin{array}{r} 495 \\ \times \quad 53 \\ \hline \end{array}$$

25,000

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$$\begin{array}{r} 4{,}841 \\ \times \quad\quad 2 \\ \hline \end{array}$$

10,000

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$$\begin{array}{r} 3{,}299 \\ \times \quad 8 \\ \hline 24{,}000 \end{array}$$

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$$\begin{array}{r} 251 \\ \times \quad 6 \\ \hline 1{,}800 \end{array}$$

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$$\begin{array}{r} 725 \\ \times \quad 38 \\ \hline \end{array}$$

28,000

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$$\begin{array}{r} 1{,}238 \\ \times \quad 2 \\ \hline \end{array}$$

2,000

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$$\begin{array}{r} 68 \\ \times\ 43 \\ \hline \end{array}$$

2,800

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$$\begin{array}{r} 791 \\ \times \quad 2 \\ \hline 1{,}600 \end{array}$$

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$$\begin{array}{r} 167 \\ \times \quad 27 \\ \hline \end{array}$$

6,000

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$$\begin{array}{r} 45 \\ \times\ \ 3 \\ \hline 150 \end{array}$$

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$$\begin{array}{r} 774 \\ \times \quad 86 \\ \hline \end{array}$$

72,000

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$$\begin{array}{r} 375 \\ \times \quad 2 \\ \hline 800 \end{array}$$

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$$\begin{array}{r} 916 \\ \times \quad 95 \\ \hline \end{array}$$

90,000

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$$\begin{array}{r} 188 \\ \times \quad 74 \\ \hline \end{array}$$

14,000

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$$\begin{array}{r} 46 \\ \times\ 25 \\ \hline \end{array}$$

1,500

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$$\begin{array}{r} 6{,}581 \\ \times \quad\quad 3 \\ \hline 21{,}000 \end{array}$$

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$$\begin{array}{r} 454 \\ \times \quad 5 \\ \hline \end{array}$$

2,500

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$$\begin{array}{r} 84 \\ \times\ 32 \\ \hline \end{array}$$

2,400

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$$\begin{array}{r} 68 \\ \times\ \ 5 \\ \hline 350 \end{array}$$

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$$\begin{array}{r} 57 \\ \times\ 35 \\ \hline \end{array}$$

2,400

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$$\begin{array}{r} 94 \\ \times\ 89 \\ \hline \end{array}$$

8,100

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$$\begin{array}{r} 58 \\ \times\ 44 \\ \hline \end{array}$$

2,400

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$$\begin{array}{r} 871 \\ \times \quad 2 \\ \hline \end{array}$$

1,800

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$$\begin{array}{r} 682 \\ \times \quad 34 \\ \hline \end{array}$$

2,100

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$$\begin{array}{r} 912 \\ \times \quad 76 \\ \hline \end{array}$$

7,200

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$$\begin{array}{r} 46 \\ \times\ \ 7 \\ \hline 350 \end{array}$$

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A passenger train travels 94 miles in one hour. If it continues traveling at the same speed, how far will it travel in 12 hours?

1,128 miles

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The school auditorium has 23 rows of seats. Each row has 18 seats. How many seats are in the auditorium in all?

414 seats

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An auto transport trailer is carrying 6 of the same cars. Each car weighs 4,289 pounds. What is the total weight of the cars on the trailer?

25,734 pounds

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Cameron is making beaded necklaces. She uses 225 beads for each necklace. How many beads will she need to make 32 necklaces?

7,200 beads

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The manager of the school cafeteria ordered 43 boxes of oranges. There are 28 oranges in each box. How many oranges did the manager order in all?

1,204 oranges

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There are 5,280 feet in one mile. Marcello is training for a marathon. On one of his training runs, he ran 8 miles. How many feet did he run?

42,240 feet

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A van is 20 feet long. The Golden Gate Bridge is 449 times as long as the van. How long is the Golden Gate Bridge?

8,980 feet

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A restaurant is ordering 31 new tables. Each table costs $219. What is the total cost of all the tables the restaurant orders?

$6,789

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$0.5 \times 10 =$ 5

$0.5 \times 100 =$ 50

$0.5 \times 1{,}000 =$ 500

$0.5 \times 10{,}000 =$ 5,000

$0.5 \times 100{,}000 =$ 50,000

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$1.5 \times 10 =$ 15

$1.5 \times 100 =$ 150

$1.5 \times 1{,}000 =$ 1,500

$1.5 \times 10{,}000 =$ 15,000

$1.5 \times 100{,}000 =$ 150,000

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$0.03 \times 10 =$ 0.3

$0.03 \times 100 =$ 3

$0.03 \times 1{,}000 =$ 30

$0.03 \times 10{,}000 =$ 300

$0.03 \times 100{,}000 =$ 3,000

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$0.032 \times 10 =$ 0.32

$0.032 \times 100 =$ 3.2

$0.032 \times 1{,}000 =$ 32

$0.032 \times 10{,}000 =$ 320

$0.032 \times 100{,}000 =$ 3,200

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$0.19 \times 10 =$ 1.9

$0.19 \times 100 =$ 19

$0.19 \times 1{,}000 =$ 190

$0.19 \times 10{,}000 =$ 1,900

$0.19 \times 100{,}000 =$ 19,000

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$5.27 \times 10 =$ 52.7

$5.27 \times 100 =$ 527

$5.27 \times 1{,}000 =$ 5,270

$5.27 \times 10{,}000 =$ 52,700

$5.27 \times 100{,}000 =$ 527,000

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$$3.6 \times 2.5$$

~12

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$$17.3 \times 4.02$$

~68

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$$25.9 \times 1.2$$

~26

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$$0.95 \times 15.4$$

~15

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$$0.52 \times 0.19$$

~0.2

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$$0.36 \times 0.71$$

~0.28

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$$0.08 \times 0.44$$

~0.4

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$$0.96 \times 0.322$$

~1

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$$8.3 \times 0.5$$

~8

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$$22.5 \times 0.8$$

~23

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$$312.8 \times 40.02$$

~12,000

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$$0.66 \times 8.3$$

~8

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$$56.2 \times 0.89$$

~56

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$$0.29 \times 0.405$$

~0.12

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$$0.8 \times 9.5$$

~10

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$$4.32 \times 14.651$$

~60

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$$0.29 \times 0.8 = .232$$

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$$1.5 \times 18.2 = 27.3$$

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$$40.5 \times 0.19 = 7.695$$

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$$8.2 \times 0.54 = 4.428$$

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$$\begin{array}{r} 2.9 \\ \times\ 0.3 \\ \hline \end{array}$$

0.87

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$$\begin{array}{r} 5.8 \\ \times\ 0.3 \\ \hline 1.74 \end{array}$$

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$$\begin{array}{r} 8.2 \\ \times\ 0.25 \\ \hline \end{array}$$

2.05

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$$\begin{array}{r} 10.6 \\ \times\ 0.2 \\ \hline 2.12 \end{array}$$

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$$\begin{array}{r} 7.1 \\ \times\ 6.4 \\ \hline 45.44 \end{array}$$

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$$\begin{array}{r} 8.3 \\ \times 0.42 \\ \hline 3.486 \end{array}$$

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$$\begin{array}{r} 4.2 \\ \times\ 0.04 \\ \hline \end{array}$$

0.168

© Reagan Tunstall

$$\begin{array}{r} 300.4 \\ \times \quad 0.6 \\ \hline 180.24 \end{array}$$

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$$\begin{array}{r} 12.4 \\ \times\ 2.9 \\ \hline 35.96 \end{array}$$

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$$\begin{array}{r} 9.2 \\ \times\ 0.48 \\ \hline \end{array}$$

4.416

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$$\begin{array}{r} 0.55 \\ \times\ 0.3 \\ \hline 0.165 \end{array}$$

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$$\begin{array}{r} 2.16 \\ \times\ 5.2 \\ \hline 11.232 \end{array}$$

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The cost of a school lunch is $2.45. What would be the total cost for 5 days of lunches? What would be the total cost for 22 days of lunches?

$12.25 for 5 days
$53.90 for 22 days

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What is the area, in square meters, of a garden that is 4.55 meters long and 3.2 meters wide?

14.56 square meters

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A merry-go-round rotates 1 time in 0.4 minutes. How many minutes would it take the merry-go-round to rotate 5.5 times?

2.2 minutes

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Savannah is making fleece blankets. For each blanket, she uses 2.5 square yards of fabric. One square yard of fleece fabric costs $3.80. How much would it cost to buy the fabric to make 1 blanket? How much would it cost to buy the fabric to make 5 blankets?

$9.50 for 1 blanket
$47.50 for 5 blankets

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The height of a building block is 3.75 inches. Jack builds a tower using 6 blocks. What is the height of the tower? If Jack doubles the height of his tower, how tall will it be?

22.5 inches

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Sam is 1.5 times as tall as his brother Michael. Michael is 91.44 centimeters tall. How tall is Sam?

137.16 centimeters

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What is the total cost of 15 pens if each pen costs $0.27?

$4.05

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A ticket to the museum costs $6.99 per student. What is the total cost for 58 students?

$405.42

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Find each product.

$34 \times 10 =$ 340

$34 \times 100 =$ 3,400

$34 \times 1{,}000 =$ 34,000

$3.4 \times 10 =$ 34

$3.4 \times 100 =$ 340

$3.4 \times 1{,}000 =$ 3,400

Explain how to multiply any whole number or decimal by a power of 10.

Sample answer:
Multiplying any whole number or decimal by a power of 10 will add a zero to the end of the number.

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Multiply.

$9 \times 105 =$ 945

$670 \times 102 =$ 68,340

$42 \times 103 =$ 4,326

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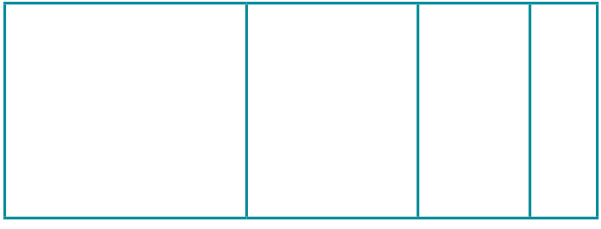
Use the area model to find the product.

$6 \times 7{,}423 =$ **44,538**



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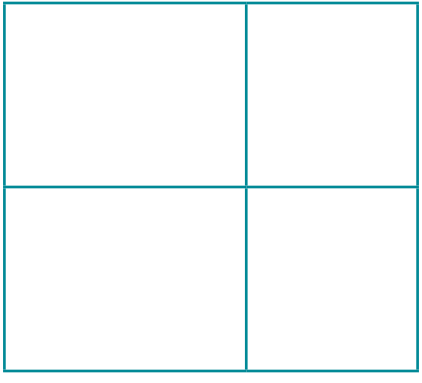
Use the area model to find the product.

$56 \times 32 =$ **1,792**



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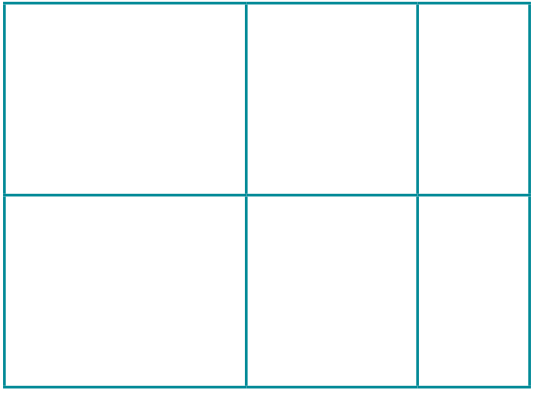
Use the area model to find the product.

$374 \times 49 = 18{,}326$



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How many crayons are in 350 boxes of crayons if there are 64 crayons in each box?

22,400 crayons

© Reagan Tunstall

Multiply.

$$\begin{array}{r} 78 \\ \times\ 44 \\ \hline 3{,}432 \end{array}$$

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Multiply.

$$\begin{array}{r} 844 \\ \times \quad 29 \\ \hline \end{array}$$

24,476

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Place the decimal point in each product. Add zeros if necessary.

$42.3 \times 6.5 = 274.95$

$0.8 \times 0.43 = .344$

$1.9 \times 43.7 = 83.03$

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Find the product using any method you choose. Explain how you found your answer.

$6.3 \times 3.4 = 21.42$

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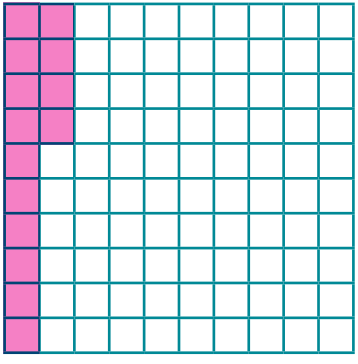
Shade the model to find the product.

$0.7 \times 0.2 =$



© Reagan Tunstall

Multiply.

$$\begin{array}{r} 0.43 \\ \times \quad 0.8 \\ \hline \end{array}$$

0.344

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