ESTAR INTERVENTION

Tier 2 Mathematics Intervention

Module: *Multiplication & Division of Whole Numbers (MDWN)*

Teacher Display Masters

The Meadows Center for Preventing Educational Risk—Mathematics Institute
The University of Texas at Austin

The Meadows Center

FOR PREVENTING EDUCATIONAL RISK

THE UNIVERSITY OF TEXAS AT AUSTIN

COLLEGE OF EDUCATION

Mathematics Institute for Learning Disabilities and Difficulties

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1										
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STOP

Break Apart Strategy

6 × 7

Step 1.) Break apart the factor. _____ + _____ × 7

Step 2.) Multiply by the other factor. _____ × 7 + _____ × 7

Step 3.) Add the products. _____ + _____ = _____

Break Apart Strategy

6 × 7

Step 1.) Break apart the factor. 6 × _____ + _____

Step 2.) Multiply by the other factor. 6 × _____ + 6 × _____

Step 3.) Add the products. _____ + _____ = _____

Make 10 Subtract the Factor Strategy

9 × 4

Step 1.) Think of 9 as 10 - 1. 9 × 4 = _____ + _____

Step 2.) Multiply the other factor by 10. _____ × _____ = _____

Step 3.) Subtract the other factor. _____ – _____ = _____

STOP

Doubling Strategy for 4s

9 × 4

Step 1.) Think of 4 as 2 × 2. 9 × _____ × _____

Step 2.) Double the factor. _____ × 2 = _____

Step 3.) Double the product. _____ – _____ = _____

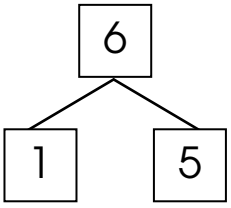
Break Apart Strategy

6 × 7

Step 1.) Break apart the factor. 1 + 5 × 7

Step 2.) Multiply by the other factor. 1 × 7 + 5 × 7

Step 3.) Add the products. 7 + 35 = 42



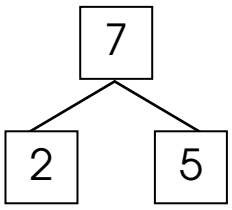
Break Apart Strategy

6 × 7

Step 1.) Break apart the factor. 6 × __2__ + __5__

Step 2.) Multiply by the other factor. 6 × __2__ + 6 × __5__

Step 3.) Add the products. __12__ + __30__ = __42__



Make 10 Subtract the Factor Strategy

9 × 4

Step 1.) Think of 9 as 10 - 1. 9 × 4 = 10 + 4

Step 2.) Multiply the other factor by 10. 10 × 4 = 40

Step 3.) Subtract the other factor. 40 – 4 = 36

Doubling Strategy for 4s

9 × 4

Step 1.) Think of 4 as 2 × 2. 9 × __2__ × __2__

Step 2.) Double the factor. __9__ × 2 = __18__

Step 3.) Double the product. __18__ – __2__ = __36__

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
25	27	28	30	32	35
36	40	42	45	48	49
54	56	63	64	72	81

Josie	
Micah	

Use the game board above to answer the following questions.

1.) If Josie had factor cards 3, 4, and 9 in her hand, which product square should she cover with her counter? Why?

2.) Micah was trying to cover the product 54 with his counter. He had already drawn a factor of 6. What other cards does he need to draw to be able to cover 54?

3.) Josie drew the factor cards 5, 7, and 6. List the product numbers she could cover that are not already covered.

STOP

1	2	3	4	5	6
7	8	9	10	12	14
15	16	18	20	21	24
25	27	28	30	32	35
36	40	42	45	48	49
54	56	63	64	72	81

Josie	
Micah	

Use the game board above to answer the following questions.

1.) If Josie had factor cards 3, 4, and 9 in her hand, which product square should she cover with her counter? Why?

12 to block Micah and get 3 in a row

2.) Micah was trying to cover the product 54 with his counter. He had already drawn a factor of 6. What other cards does he need to draw to be able to cover 54?

9

3.) Josie drew the factor cards 5, 7, and 6. List the product numbers she could cover that are not already covered.

30, 42

STOP

Tina and Alfredo are playing the same game Josie and Micah played. Answer the questions about their game.

1.) Tina has factor cards 1, 3, and 8 in her hand. List 2 multiplication equations that she can create with these 3 cards.

2.) Alfredo has 2 factor cards that are the same number. List 3 possible products he could cover. (Example: He could cover 1 because he has 1 × 1.)

3.) Tina covers product square 7 with her counter and says, "3 × 4 is 7." Is she correct? Why or why not?

If not, what strategy do you suggest she uses to correct herself?

4.) Alfredo has factor cards 3 and 8. He put his counter on 24. Is he correct?

Use a strategy to show what he might have done to solve.

Tina and Alfredo are playing the same game Josie and Micah played. Answer the questions about their game.

1.) Tina has factor cards 1, 3, and 8 in her hand. List 2 multiplication equations that she can create with these 3 cards.

$1 \times 3 = 3$ $3 \times 1 = 3$

$1 \times 8 = 8$ $8 \times 1 = 8$

$3 \times 8 = 24$ $8 \times 3 = 24$

2.) Alfredo has 2 factor cards that are the same number. List 3 possible products he could cover. (Example: He could cover 1 because he has 1×1.)

$2 \times 2 = 4$ $5 \times 5 = 25$ $8 \times 8 = 64$

$3 \times 3 = 9$ $6 \times 6 = 36$ $9 \times 9 = 81$

$4 \times 4 = 16$ $7 \times 7 = 49$

3.) Tina covers product square 7 with her counter and says, "3×4 is 7." Is she correct? Why or why not?

no, $3 + 4 = 7$
$3 \times 4 = 12$

If not, what strategy do you suggest she uses to correct herself?

Doubling Strategy

$3 \times 2 = 6$ $3 \times 2 = 6$ $6 \times 2 = 12$

4.) Alfredo has factor cards 3 and 8. He put his counter on 24. Is he correct?

Yes

Use a strategy to show what he might have done to solve.

3×8
$3 \times 2 = 6$
6×4
$6 \times 2 \times 2$
$6 \times 2 = 12$
$12 \times 2 = 24$

Multiply by Powers of 10.

Use a marker or highlighter for the Powers of 10.

1.) 60 × 10 = _____

2.) 100 × 7 = _____

3.) 60 × 100 = _____

4.) 1,000 × 7 = _____

5.) 60 × 1,000 = _____

6.) There are 100 centimeters in every meter. How many centimeters are in 12 meters?

What is the question asking you to find?

STOP

Multiply by Powers of 10.

Use a marker or highlighter for the Powers of 10.

1.) 60 × 10 = 600*

2.) 100 × 7 = 700

3.) 60 × 100 = 6,000

4.) 1,000 × 7 = 7,000

5.) 60 × 1,000 = 60,000

* The larger 0s on the answer key represent the numerals to be highlighted.

6.) There are 100 centimeters in every meter. How many centimeters are in 12 meters?

12 × 100

1,200 centimeters

What is the question asking you to find?

The number of centimeters in 12 meters.

Multiply by Powers of 10.

Use a marker or highlighter for the Powers of 10.

1.) 5 × 1,000 = _____

2.) 100 × 30 = _____

3.) 10 × 80 = _____

4.) 20 × 1,000 = _____

5.) 90 × 10 = _____

6.) 15 × 100 = _____

7.) 1,000 × 40 = _____

8.) 100 × 700 = _____

Choose the best answer.

9.) There are 100 centimeters in every meter. How many centimeters are in 12 meter?

A 300 grams

B 3,000 grams

C 30 grams

D 1,003 grams

10.) The city of Chicago is the third most populated city in the United States with approximately 3 million people. The United States population is 100 times more populous. About how many people live in the United States?

A 30 million

B 300 million

C 3,000 million

D 1 million

Solve the multiplication problem using two different strategies.

11.) $6 \times 4 =$ _____

12.) $6 \times 4 =$ _____

STOP

Multiply by Powers of 10.

Use a marker or highlighter for the Powers of 10.

1.) 5 × 1,000 = 5,000*

2.) 100 × 30 = 3,000

3.) 10 × 80 = 800

4.) 20 × 1,000 = 20,000

5.) 90 × 10 = 900

6.) 15 × 100 = 1,500

7.) 1,000 × 40 = 40,000

8.) 100 × 700 = 70,000

*** The larger 0s on the answer key represent the numerals to be highlighted.**

Choose the best answer.

9.) There are 100 centimeters in every meter. How many centimeters are in 12 meter?

A 300 grams

B 3,000 grams

C 30 grams

D 1,003 grams

10.) The city of Chicago is the third most populated city in the United States with approximately 3 million people. The United States population is 100 times more populous. About how many people live in the United States?

A 30 million

B 300 million

C 3,000 million

D 1 million

Solve the multiplication problem using two different strategies.

11.) 6 × 4 = 24

6 × 2 × 2
6 × 2 = 12
12 × 2 = 24

12.) 6 × 4 = 24

(1 + 5) × 4)
(1 × 4) + (5 × 4)
4 + 20 = 24

$4 \times 3 = \_\_\_$

40×30

Think Think

$\_\_\_ \times \_\_\_ \times \_\_\_ \times \_\_\_$

$\_\_\_ \times \_\_\_ \times 10 \times 10$

$\_\_\_ \times \_\_\_$

$40 \times 30 = \_\_\_\_\_$

$4 \times 5 = \_\_\_$

40×50

Think Think

$\_\_\_ \times \_\_\_ \times \_\_\_ \times \_\_\_$

$\_\_\_ \times \_\_\_ \times 10 \times 10$

$\_\_\_ \times \_\_\_$

$40 \times 50 = \_\_\_\_\_$

STOP

$4 \times 3 = \underline{12}$

40×30

Think Think

$\underline{\boxed{4}} \times \underline{10} \times \underline{\boxed{3}} \times \underline{10}$

$\underline{\boxed{4}} \times \underline{\boxed{3}} \times 10 \times 10$

$\underline{12} \times \underline{100}$

$40 \times 30 = \underline{1{,}200}$

$4 \times 5 = \underline{20}$

40×50

Think Think

$\underline{\boxed{4}} \times \underline{10} \times \underline{\boxed{5}} \times \underline{0}$

$\underline{\boxed{4}} \times \underline{\boxed{5}} \times 10 \times 10$

$\underline{20} \times \underline{100}$

$40 \times 50 = \underline{2{,}000}$

Use a strategy to solve.

1.) Mrs. Hern has 30 fourth grade math students. She bought each student a pencil-top eraser, 2 folders, and 5 colored pens. Each eraser costs $0.20. How much did she spend on 30 erasers?

Solve the multiplication problem.

2.) 2 × 7 = ____

20 × 70

Think Think

____ × ____ × ____ × ____

____ × ____ × 10 × 10

____ × ____

20 × 70 = _____

3.) 9 × 6 = ____

90 × 60

Think Think

____ × ____ × ____ × ____

____ × ____ × 10 × 10

____ × ____

90 × 60 = _____

4.) 8 × 3 = ____

80 × 30

Think Think

____ × ____ × ____ × ____

____ × ____ × 10 × 10

____ × ____

80 × 30 = _____

Use a strategy to solve.

1.) Mrs. Hern has 30 fourth grade math students. She ordered each student a pencil-top eraser, 2 folders, and 5 colored pens. Each eraser costs $0.20. How much did she spend on 30 erasers?

20 × 130 = 600

600 cents = $6.00

Solve the multiplication problem.

2.) 2 × 7 = 14

20 × 70

Think Think

2 × 10 × 7 × 10

2 × 7 × 10 × 10

14 × 100

20 × 70 = 1,400

3.) 9 × 6 = 54

90 × 60

Think Think

9 × 10 × 6 × 10

9 × 6 × 10 × 10

54 × 100

90 × 60 = 5,400

4.) 8 × 3 = 24

80 × 30

Think Think

8 × 10 × 3 × 10

8 × 3 × 10 × 10

24 × 100

80 × 30 = 2,400

1.) Jordan Elementary went on a fourth grade field trip. There were 20 chaperones on the trip. Each chaperone was in charge of 10 students. How many students went on the fourth grade field trip?

A 200 students

B 20,000 students

C 2,000 students

D 130 students

Use a strategy to solve.

2.) 8 × 7 = _____

Solve the multiplication problem.

3.) 3 × 6 = _____

30 × 60

Think Think

_____ × _____ × _____ × _____

_____ × _____ × 10 × 10

_____ × _____

80 × 30 = _____

Solve the multiplication problem.

4.) 3 × 6 = _____

30 × 60

Think Think

_____ × _____ × _____ × _____

_____ × _____ × 10 × 10

_____ × _____

30 × 60 = _____

5.) 4 × 9 = _____

40 × 90

Think Think

_____ × _____ × _____ × _____

_____ × _____ × 10 × 10

_____ × _____

40 × 90 = _____

1.) Jordan Elementary went on a fourth grade field trip. There were 20 chaperones on the trip. Each chaperone was in charge of 10 students. How many students went on the fourth grade field trip?

(A) 200 students
B 20,000 students
C 2,000 students
D 130 students

Use a strategy to solve.

2.) 8 × 7 = 56

7 × 2 = 14
14 × 2 = 28
28 × 2 = 56

or

8 × (2 + 5)
(8 × 2) + (8 × 5)
16 + 40 = 56

Solve the multiplication problem.

3.) 8 × 5 = 40

80 × 50

Think Think

8 × 10 × 5 × 10

8 × 5 × 10 × 10

40 × 100

80 × 50 = 4,000

Solve the multiplication problem.

4.) 3 × 6 = 18

30 × 60

Think Think

3 × 10 × 6 × 10

3 × 6 × 10 × 10

18 × 100

30 × 60 = 1,800

5.) 4 × 9 = 36

40 × 90

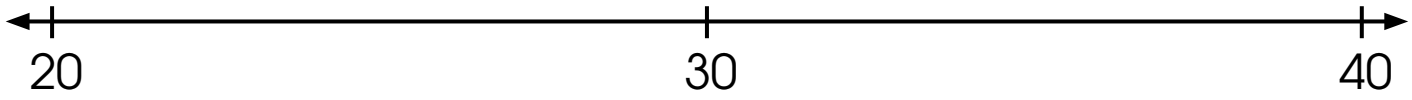
Think Think

4 × 10 × 9 × 10

4 × 9 × 10 × 10

36 × 100

40 × 90 = 3,600



37 × 28

Think ____ × ____ = ____ Think

____ × ____ × ____ × ____

____ × ____ = ____

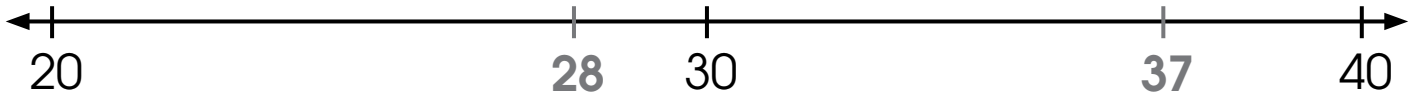
Compatible numbers as a tool to estimate.

52 × 68

Think ____ × ____ = ____ Think

____ × ____ × ____ × ____

____ × ____ = ____



37 × 28

↓ ↓

40 × 30 = 1,200

Think Think

4 × 10 × 3 × 10

12 × 100 = 1,200

Compatible numbers as a tool to estimate.

52 × 68

↓ ↓

50 × 70 = 3,500

Think Think

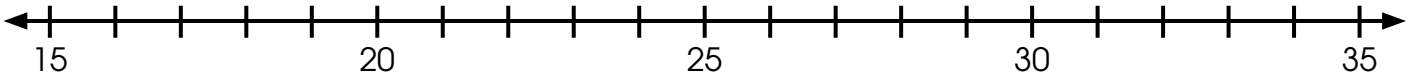
5 × 10 × 7 × 10

35 × 100 = 3,500

1.) The whole school went on a trip to the aquarium. There were 17 buses, about 42 students, and 3 teachers on each bus. Estimate how many students went on the trip to the aquarium.

Find an estimated answer for the multiplication problems below. Then, use a calculator to find the exact answer. Circle "Yes" or "No" if your estimation is reasonable.

2.)



18 × 26

↓ ↓

____ × ____ = _____

18 × 26 = _____

Reasonable? Yes No

3.) 61 × 94

↓ ↓

____ × ____ = _____

61 × 94 = _____

Reasonable? Yes No

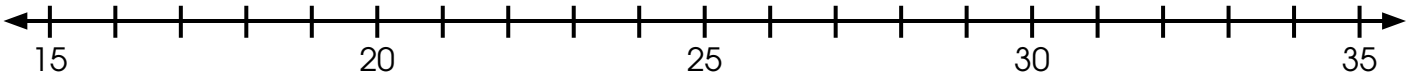
1.) The whole school went on a trip to the aquarium. There were 17 buses, about 42 students, and 3 teachers on each bus. Estimate how many students went on the trip to the aquarium.

17 × 42

20 × 40 = 800

Find an estimated answer for the multiplication problems below. Then, use a calculator to find the exact answer. Circle "Yes" or "No" if your estimation is reasonable.

2.)



18 × 26

↓ ↓

20 × **30** = **600**

18 × 26 = **468**

Reasonable? Yes No

3.) 61 × 94

↓ ↓

60 × **90** = **5,400** or **60** × **100** = **6,000**

61 × 94 = **5,734**

Reasonable? Yes No

Solve using a strategy.

1.) 4 × 8 = _____

2.) 40 × 70 = _____

Use rounding or compatible numbers to estimate each product.

3.) 49 × 51

↓ ↓

_____ × _____ = _____

4.) 72 × 94

↓ ↓

_____ × _____ = _____

5.) 24 × 42

↓ ↓

_____ × _____ = _____

6.) 15 × 18

↓ ↓

_____ × _____ = _____

7.) Yaneth baked 36 cookies for each homeroom class at Bluebonnet Elementary School. Bluebonnet Elementary School has 9 homerooms. About how many cookies did Yaneth bake?

A 45 × 10 = 450 cookies
B 30 × 10 = 300 cookies
C 40 × 20 = 800 cookies
D 36 × 10 = 360 cookies

STOP

Solve using a strategy.

1.) 4 × 8 = 32

2 × 8 = 16

2 × 16 = 32

2.) 40 × 70 = 2,800

4 × 10 + 7 × 10

28 + 100 = 2,800

Use rounding or compatible numbers to estimate each product.

3.) 49 × 51

↓ ↓

50 × 50 = 2,500

4.) 72 × 94

↓ ↓

70 × 100 = 7,000

or 70 × 90 = 6,300

5.) 24 × 42

↓ ↓

20 × 40 = 800

or 25 × 40 = 1,000

6.) 15 × 18

↓ ↓

20 × 220 = 400

7.) Yaneth baked 36 cookies for each homeroom class at Bluebonnet Elementary School. Bluebonnet Elementary School has 9 homerooms. About how many cookies did Yaneth bake?

A 45 × 10 = 450 cookies

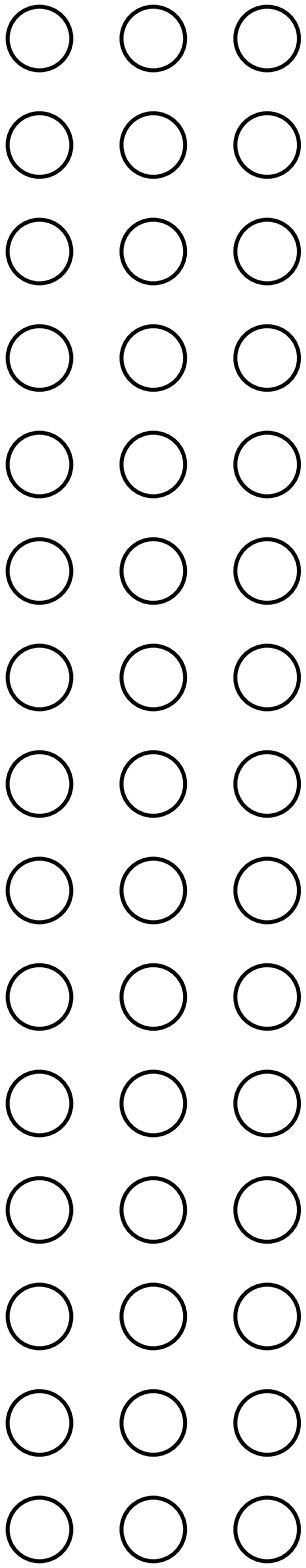
B 30 × 10 = 300 cookies

C 40 × 20 = 800 cookies

D 36 × 10 = 360 cookies

STOP

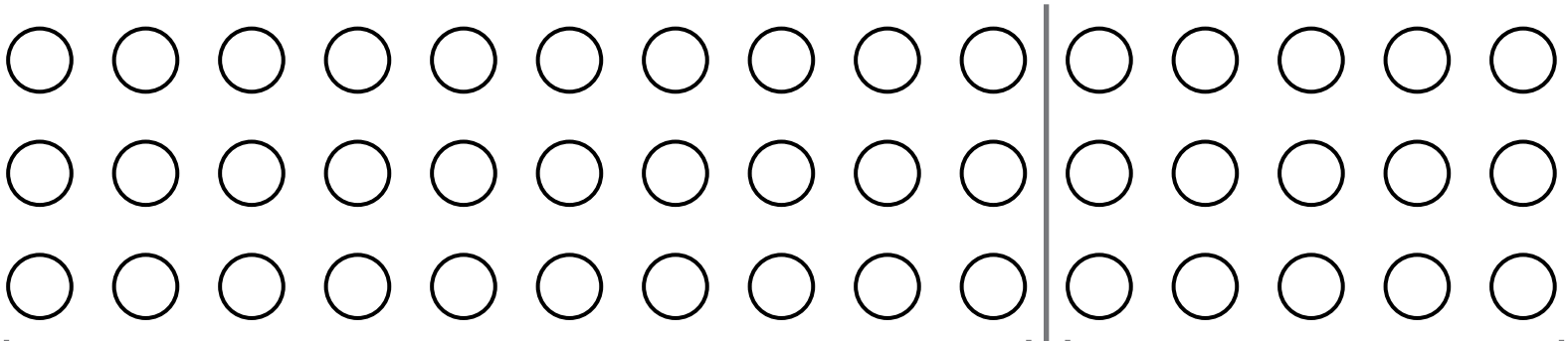
3×15



STOP

×

3×15



$3 \times 10 = 30$ $\quad$ $5 \times 15 = 30$

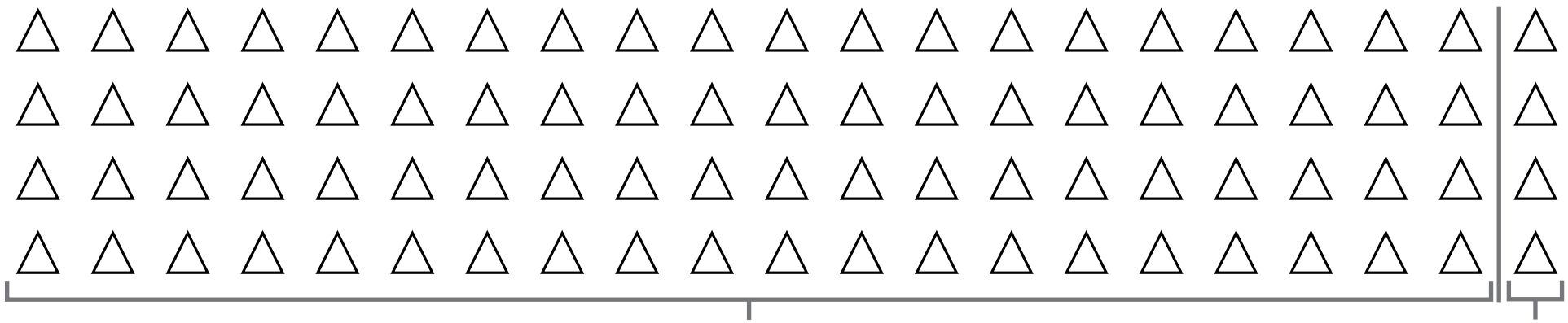
$30 + 15 = 45$

$3 \times 15 = 45$

STOP

Module MDWN
Lesson 5
Modeled Practice #2 Key

4 × 21



4 × 20 = 80 4 × 1 = 4

80 + 4 = 84

4 × 21 = 84

STOP

Solve using the partial-products method.

1.) The grocery store has a peanut butter display. The display is organized in 6 rows with 15 jars of peanut butter on each row. How many total jars of peanut butter are on display?

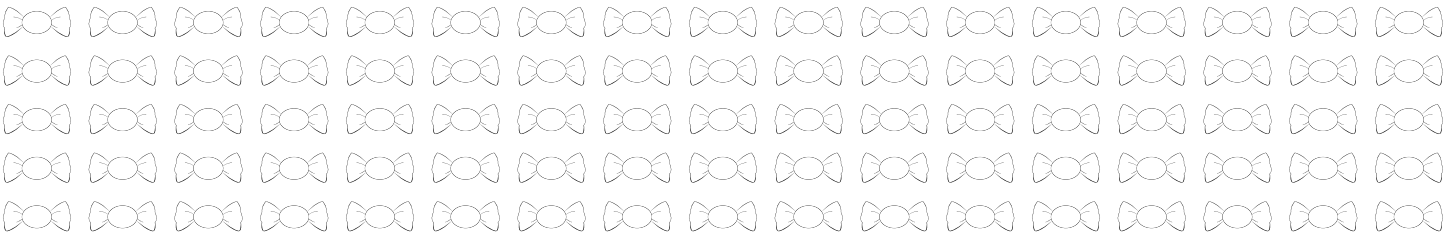
____ × ____ = _____

____ × ____ = _____ ____ × ____ = _____

____ + ____ = _____

6 × 15 = _____

2.) ____ × ____ = _____



____ × ____ = _____ ____ × ____ = _____

____ + ____ = _____

5 × 17 = _____

3.) ____ × ____ = _____

X X X X X X X X X X X X X X X X X X X X X X X
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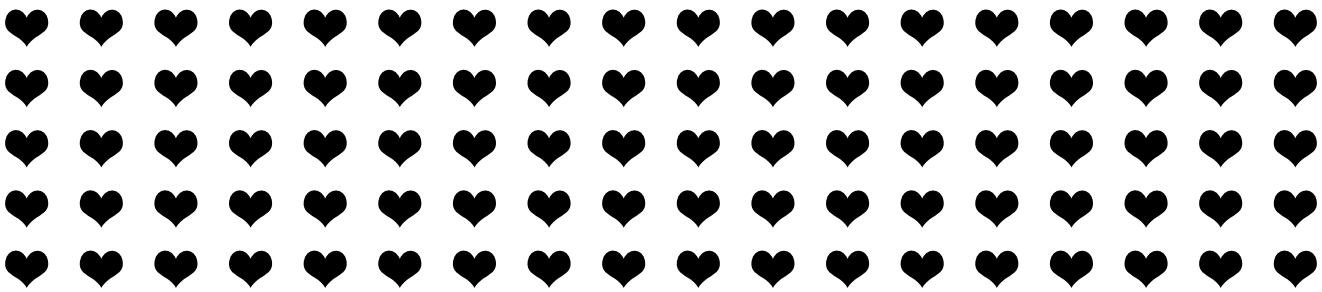
____ × ____ = _____ ____ × ____ = _____

____ + ____ = _____

23 × 4 = _____

Student "A," solve for the tens.
Student "B," solve for the ones.
Work together to find the sum.
Then, switch roles.

1.) 18 × 5 = _____

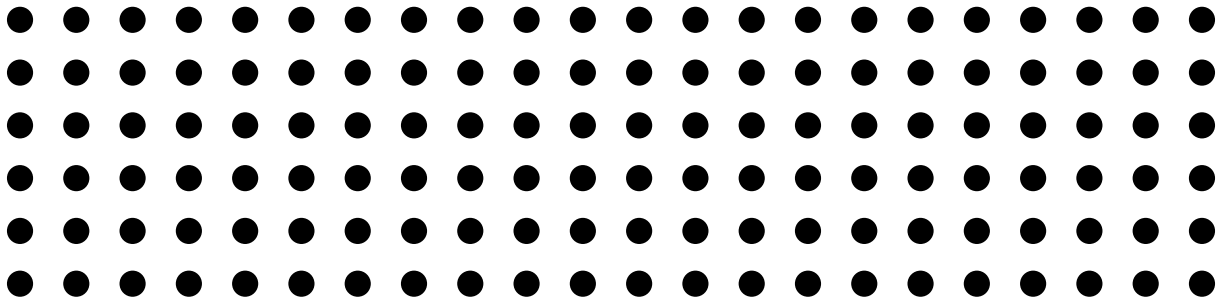


"A" "B"

____ × ____ = _____ ____ × ____ = _____

_____ + _____ = _____

2.) 22 × 6 = _____



"A" "B"

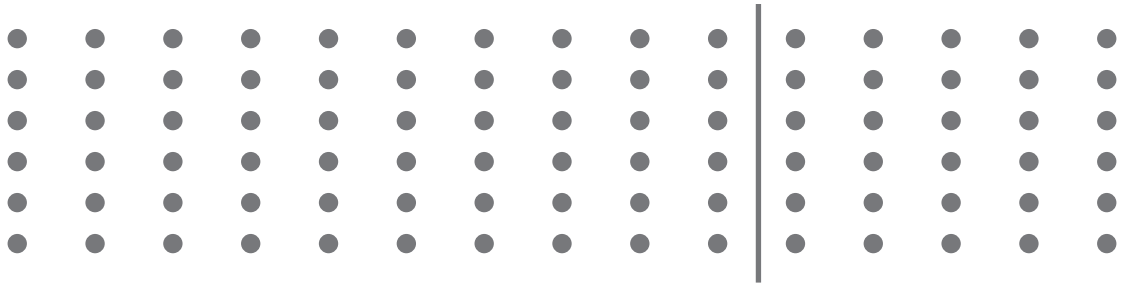
____ × ____ = _____ ____ × ____ = _____

_____ + _____ = _____

Solve using the partial-products method.

1.) The grocery store has a peanut butter display. The display is organized in 6 rows with 15 jars of peanut butter on each row. How many total jars of peanut butter are on display?

6 × 15 = 90



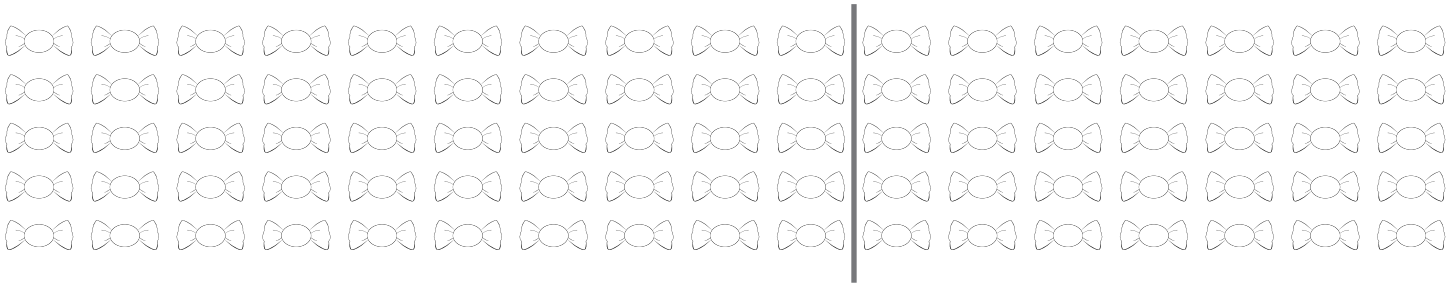
10 × 6 = 60

5 × 6 = 30

60 + 30 = 90

6 × 15 = 90

2.) 5 × 17 = 85



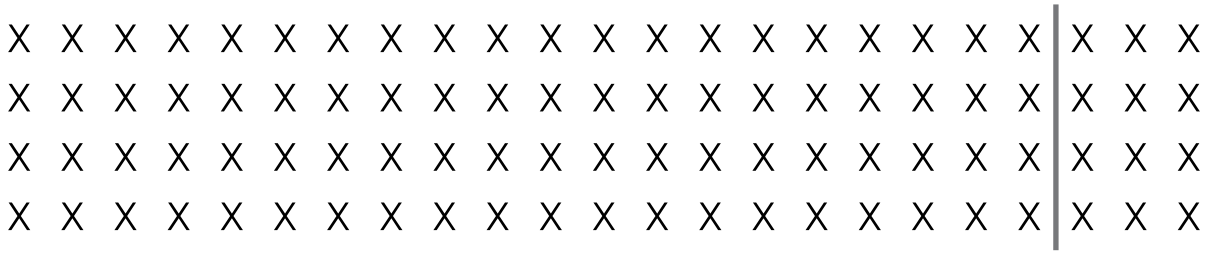
5 × 10 = 50

5 × 7 = 35

50 + 35 = 85

5 × 17 = 85

3.) 23 × 4 = 992



20 × 4 = 80

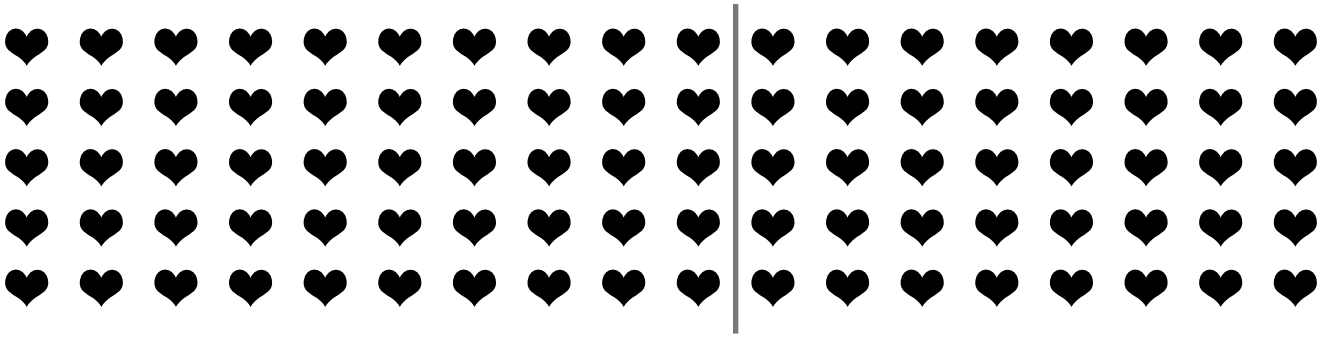
3 × 4 = 12

80 × 12 = 92

23 × 4 = 92

Student "A," solve for the tens.
Student "B," solve for the ones.
Work together to find the sum.
Then, switch roles.

1.) 18 × 5 = 90

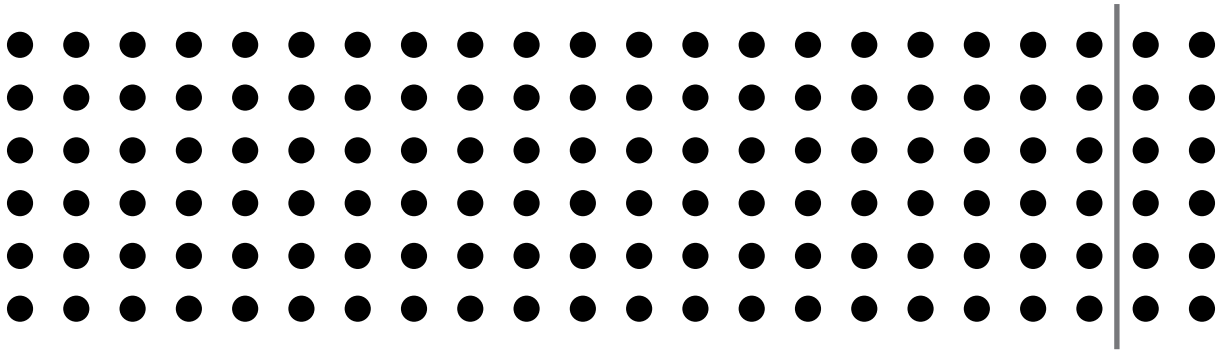


"A" "B"

10 × 5 = 50 8 × 5 = 40

50 + 40 = 90

2.) 22 × 6 = 132



"A" "B"

20 × 6 = 120 2 × 66 = 12

120 + 12 = 132

Use rounding or compatible numbers to estimate each product.

1.) 32 × 61

↓ ↓

____ × ____ = _____

2.) 79 × 11

↓ ↓

____ × ____ = _____

Use the partial-products method to solve.

3.) 18 × 4 = _____

X X X X X X X X X X X X X X X X X X
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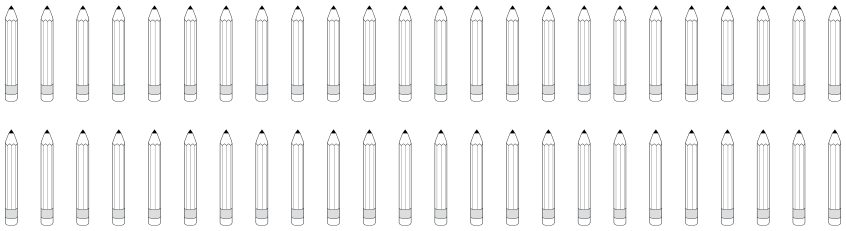
____ × ____ = _____ ____ × ____ = _____

____ + ____ = _____

4.) ____ × ____ = _____



____ × ____ = _____ ____ × ____ = _____

____ + ____ = _____

Choose the correct answer.

5.) Sammy has a collection of wizard stickers. He has 9 full pages of stickers. Each page has 52 stickers on it. How should Sammy split the factor 52 to find the partial products in order to find the total number of stickers?

A 50 × 2 and 50 × 9

B 52 × 10 and 52 × 9

C 50 × 9 and 2 × 9

D 9 × 10 and 9 × 2

Use rounding or compatible numbers to estimate each product.

1.) 32 × 61

↓ ↓

30 × 60 = 180

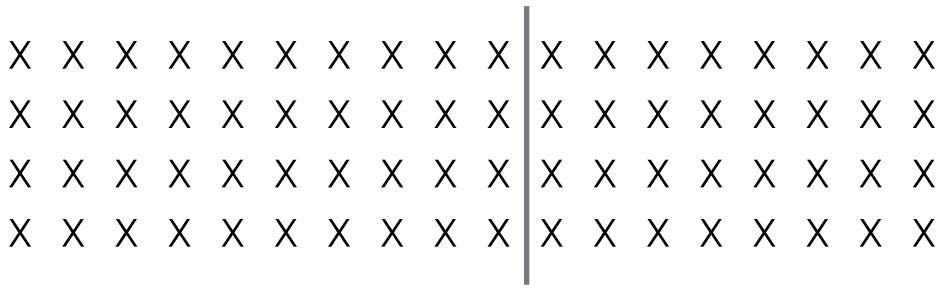
2.) 79 × 11

↓ ↓

80 × 10 = 800

Use the partial-products method to solve.

3.) 18 × 4 = 72

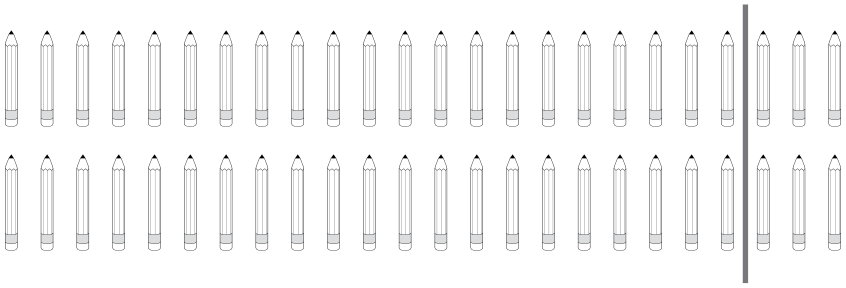


10 × 4 = 40

8 × 4 = 32

40 + 32 = 72

4.) 23 × 3 = 69



20 × 3 = 60

3 × 3 = 9

60 + 9 = 69

Choose the correct answer.

5.) Sammy has a collection of wizard stickers. He has 9 full pages of stickers. Each page has 52 stickers on it. How should Sammy split the factor 52 to find the partial products in order to find the total number of stickers?

A 50 × 2 and 50 × 9

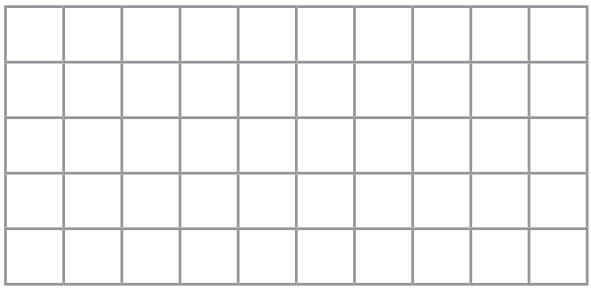
B 52 × 10 and 52 × 9

C 50 × 9 and 2 × 9

D 9 × 10 and 9 × 2

Draw an array for 4 × 7.

Draw an area model for 4 × 7.



4 × _____ + _____

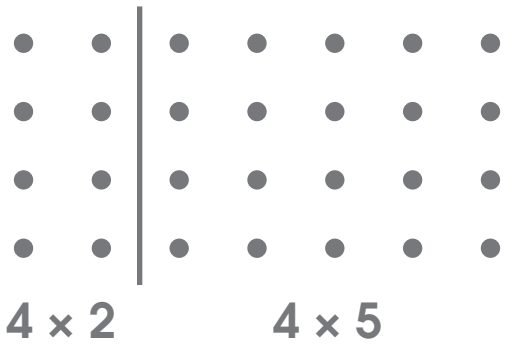
_____ × _____ = _____

_____ × _____ = _____

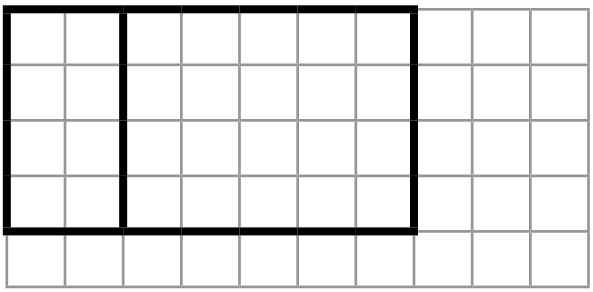
_____ + _____ = _____

4 × 7 = _____

Draw an array for 4 × 7.



Draw an area model for 4 × 7.



4 × 2 + 5

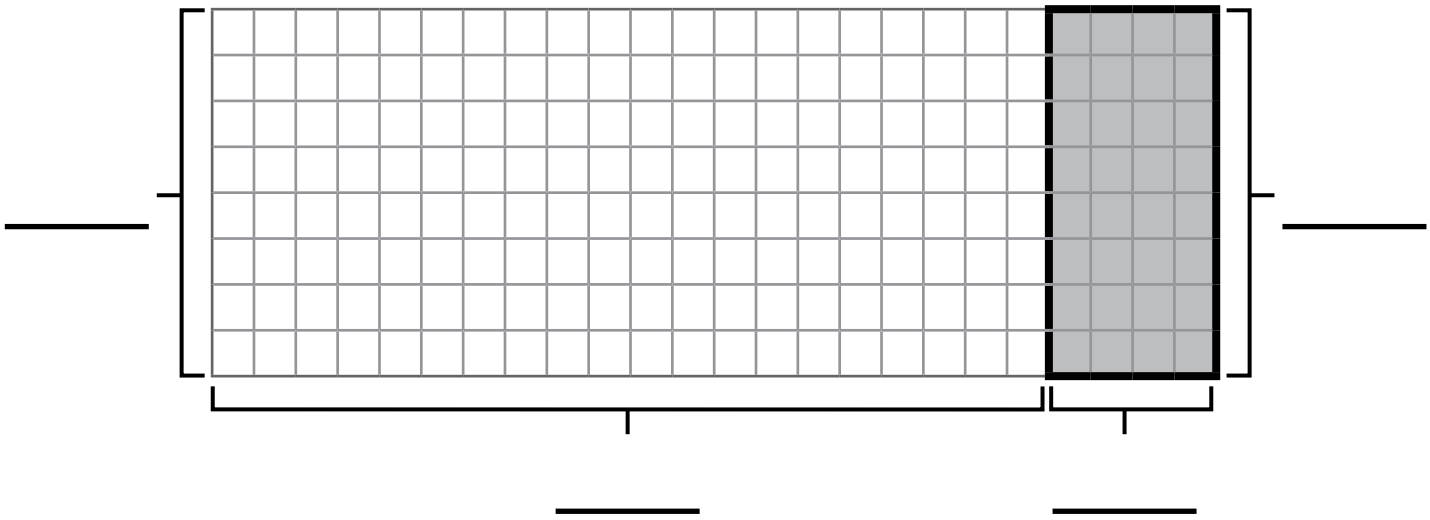
4 × 2 = 8

4 × 5 = 20

8 + 20 = 28

4 × 7 = 28

24 × 8



Estimate:

24 × 8

↓ ↓

_____ × _____ = _____

Partial-Products Method:

24 × 8

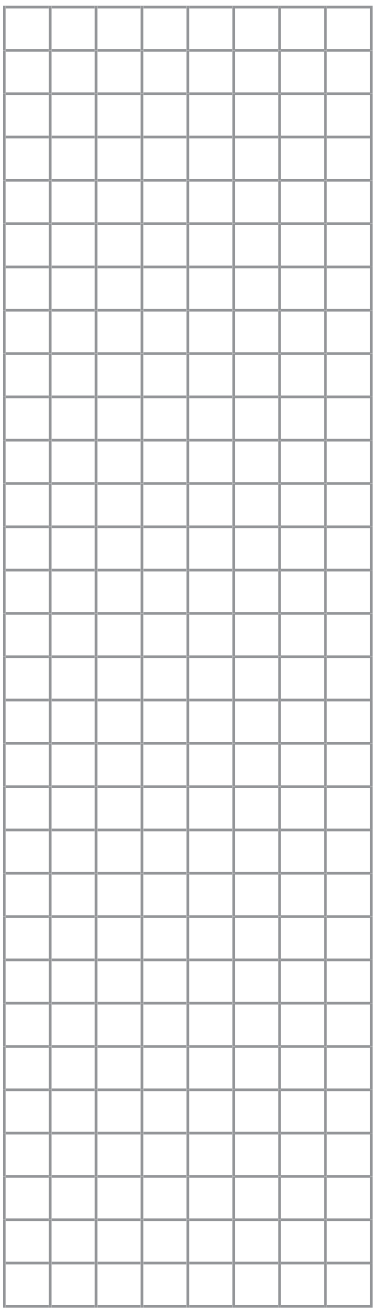
_____ × _____ = _____ _____ × _____ = _____

_____ + _____ = _____

24 × 8 = _____

STOP

The ladies' quilting club made a quilt for the auction that sold for $300. The quilt was 27 squares long and 6 squares wide. How many squares were on the quilt altogether?



Estimate:

27 × 6

↓ ↓

_____ × _____ = _____

Partial-Products Method:

27 × 6

_____ × _____ = _____

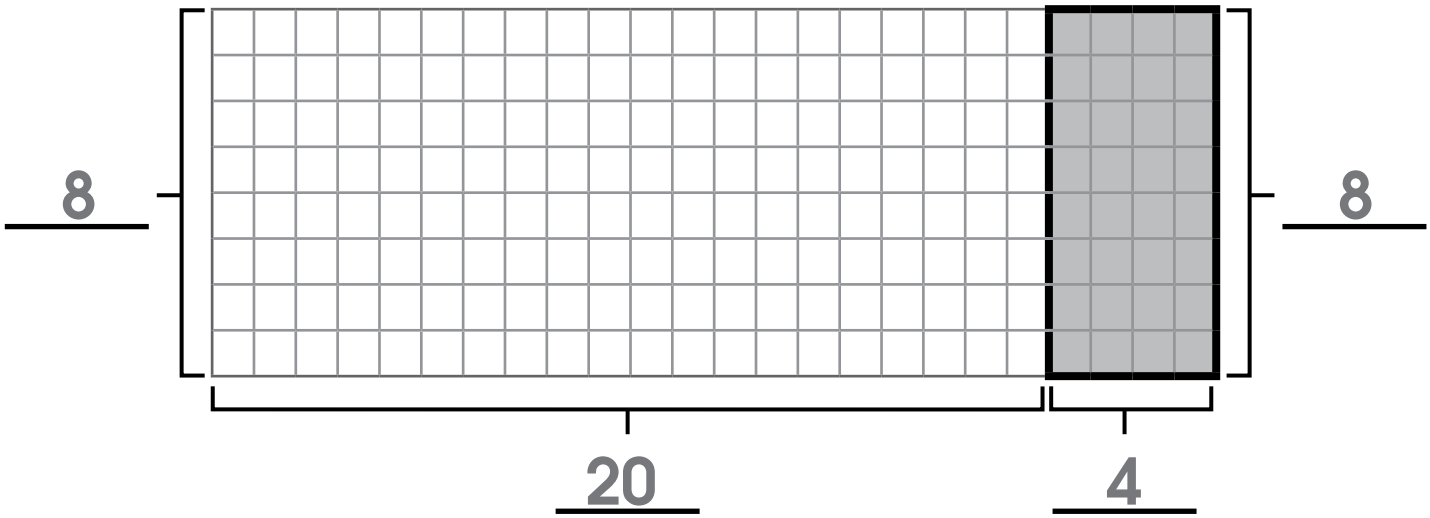
_____ × _____ = _____

_____ + _____ = _____

24 × 8 = _____

STOP

24 × 8



Estimate:

24 × 8

↓ ↓

25 × 8 = 200

Partial-Products Method:

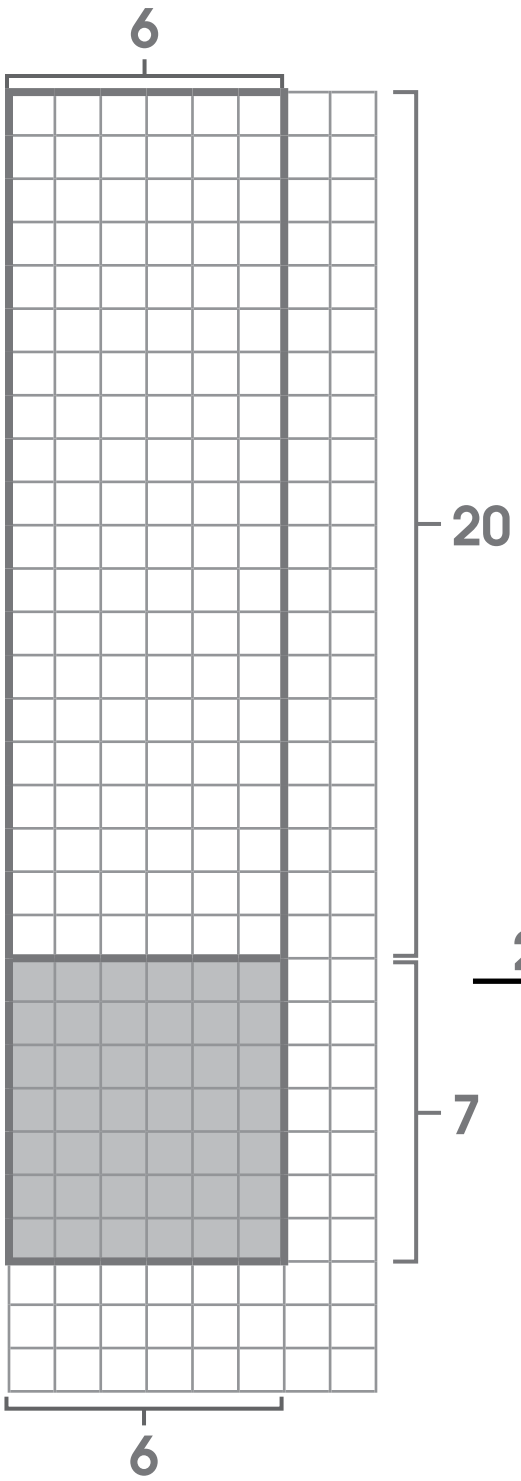
24 × 8

20 × 8 = 160 4 × 8 = 32

160 + 32 = 192

24 × 8 = 192

The ladies' quilting club made a quilt for the auction that sold for $300. The quilt was 27 squares long and 6 squares wide. How many squares were on the quilt altogether?



Estimate:

27 × 6

↓ ↓

30 × 6 = 180

Partial-Products Method:

27 × 6

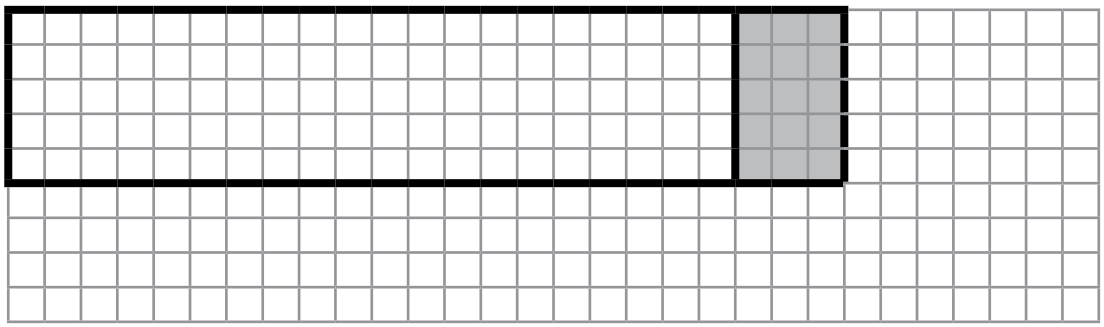
20 × 6 = 120

7 × 6 = 42

120 + 42 = 162

24 × 8 = 162

1.) Estimate the area and then solve using the partial-product method.



Estimate:

23 × 5

↓ ↓

____ × ____ = ____

Partial-Products Method:

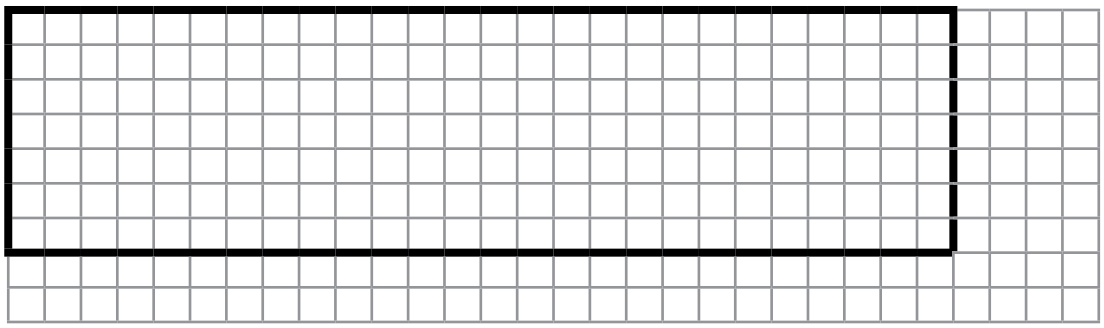
23 × 5

____ × ____ = ____ ____ × ____ = ____

____ + ____ = ____

26 × 7 = ____

2.) Draw a line to break apart the rectangle.



Estimate:

26 × 7

↓ ↓

____ × ____ = ____

Partial-Products Method:

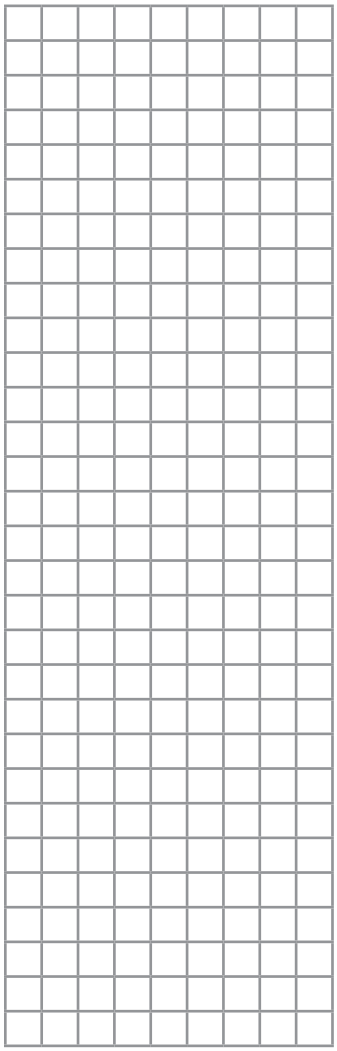
26 × 7

____ × ____ = ____ ____ × ____ = ____

____ + ____ = ____

26 × 7 = ____

3.) Draw the area model for the given problem. Draw a line to show the partial products and then label the new rectangles.



Estimate:

25 × 9

↓ ↓

____ × ____ = ____

Partial-Products Method:

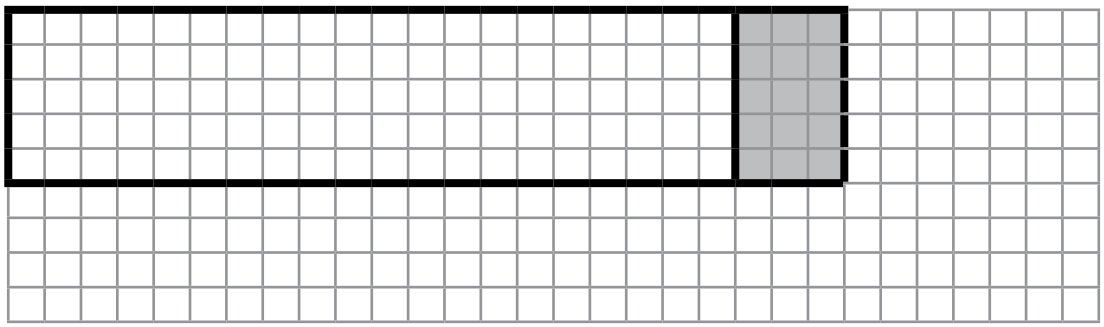
25 × 9

____ × ____ = ____ ____ × ____ = ____

____ + ____ = ____

25 × 9 = ____

1.) Estimate the area and then solve using the partial-product method.



Estimate:

23 × 5

↓ ↓

20 × 5 = 100

Partial-Products Method:

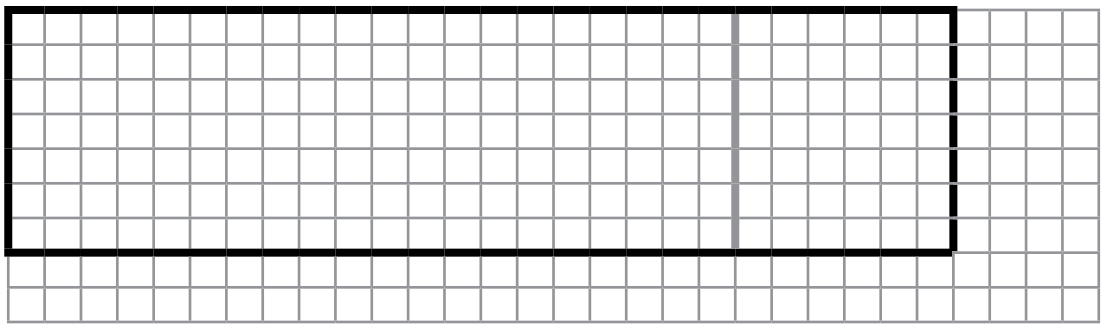
23 × 5

20 × 5 = 100 3 × 5 = 15

100 + 15 = 115

26 × 7 = 115

2.) Draw a line to break apart the rectangle.



Estimate:

26 × 7

↓ ↓

30 × 10 = 300

Partial-Products Method:

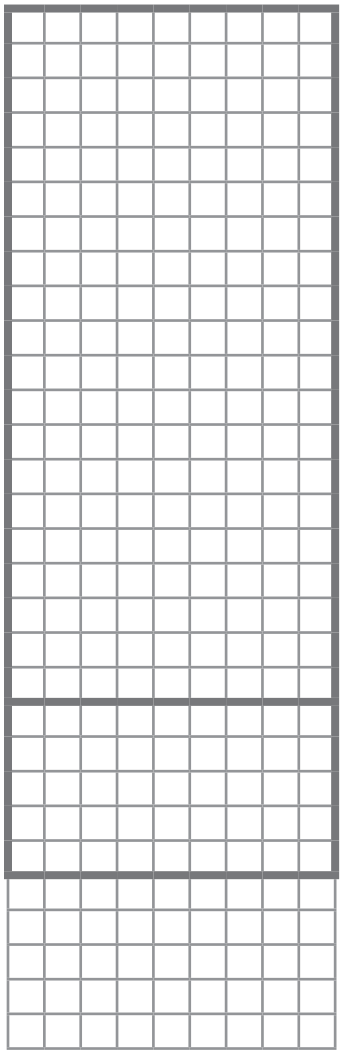
26 × 7

20 × 7 = 140 6 × 7 = 42

140 + 42 = 182

26 × 7 = 182

3.) Draw the area model for the given problem. Draw a line to show the partial products and then label the new rectangles. Solve using the partial-products method.



Estimate:

25 × 9

↓ ↓

30 × 10 = 300

Partial-Products Method:

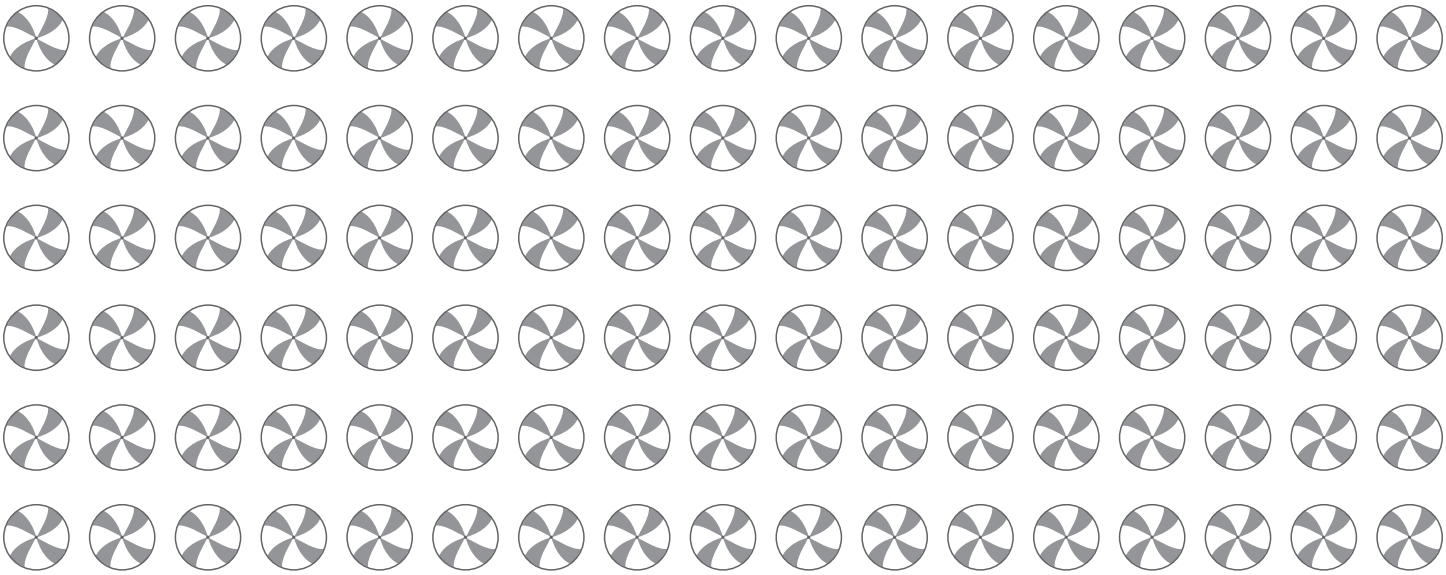
25 × 9

20 × 9 = 180 5 × 9 = 45

180 + 45 = 225

25 × 9 = 225

1.) 17 × 6 = _____



____ × ____ = _____ ____ × ____ = _____

____ × ____ = _____

17 × 6 = _____

2.) 3 × 19 = _____

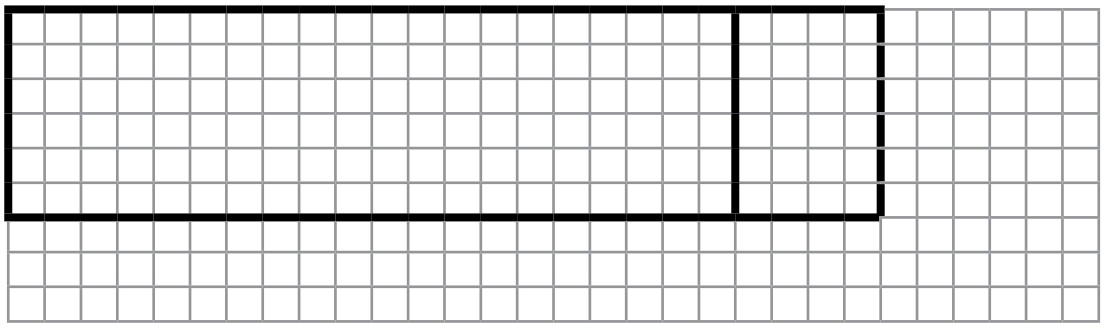
X X X X X X X X X X X X X X X X X X X
X X X X X X X X X X X X X X X X X X X
X X X X X X X X X X X X X X X X X X X

____ × ____ = _____ ____ × ____ = _____

____ × ____ = _____

3 × 19 = _____

3.) Estimate the area. Use the partial-products method to solve.



Estimate:

24 × 6

↓ ↓

____ × ____ = ____

Partial-Products Method:

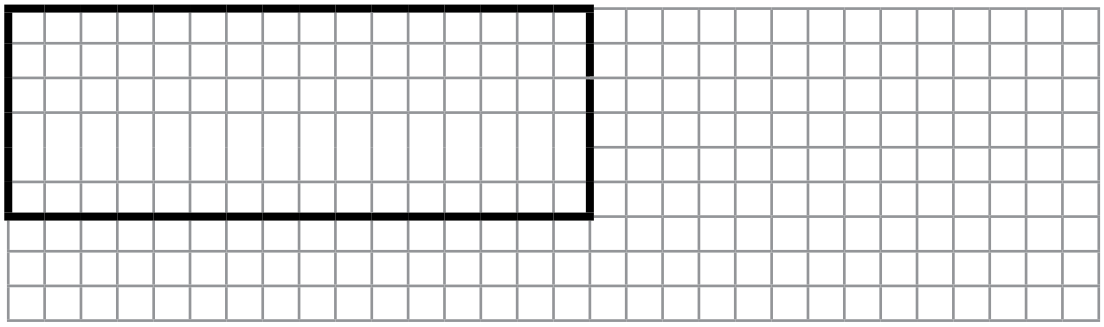
24 × 6

____ × ____ = ____ ____ × ____ = ____

____ + ____ = ____

24 × 6 = ____

4.) Draw a line to show the partial products. Label the new rectangles.



Estimate:

16 × 6

↓ ↓

____ × ____ = ____

Partial-Products Method:

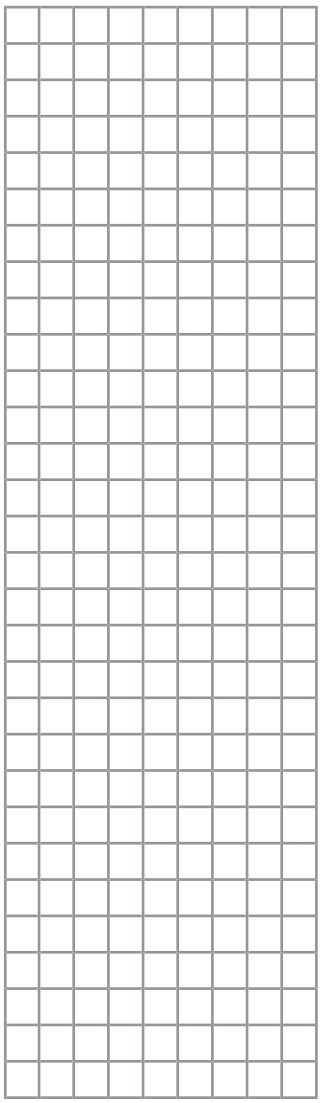
16 × 6

____ × ____ = ____ ____ × ____ = ____

____ + ____ = ____

16 × 6 = ____

5.) Draw an area model and then break apart to solve.



Estimate:

18 × 9

↓ ↓

____ × ____ = ____

Partial-Products Method:

18 × 9

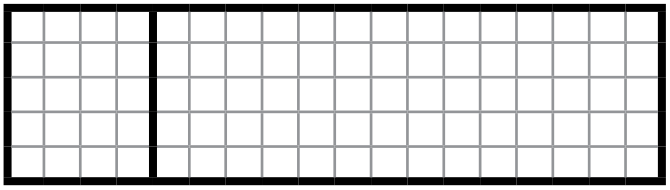
____ × ____ = ____ ____ × ____ = ____

____ + ____ = ____

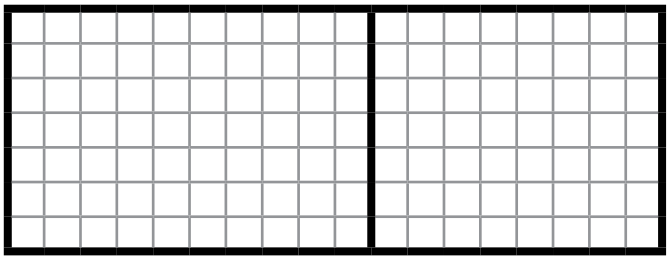
18 × 9 = ____

6.) For her birthday party, Phuynh wants to give a set of stickers to her friends as party favors. Each set contains 18 stickers. If she has 7 friends coming, how many stickers will she need? Choose the correct area model that represents the partial products method to solve.

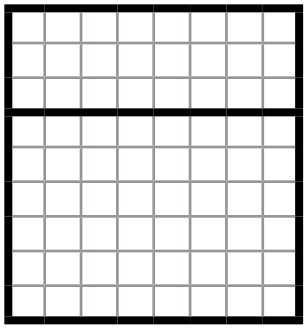
A



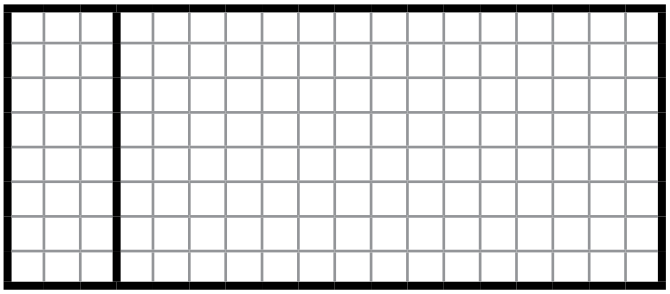
B



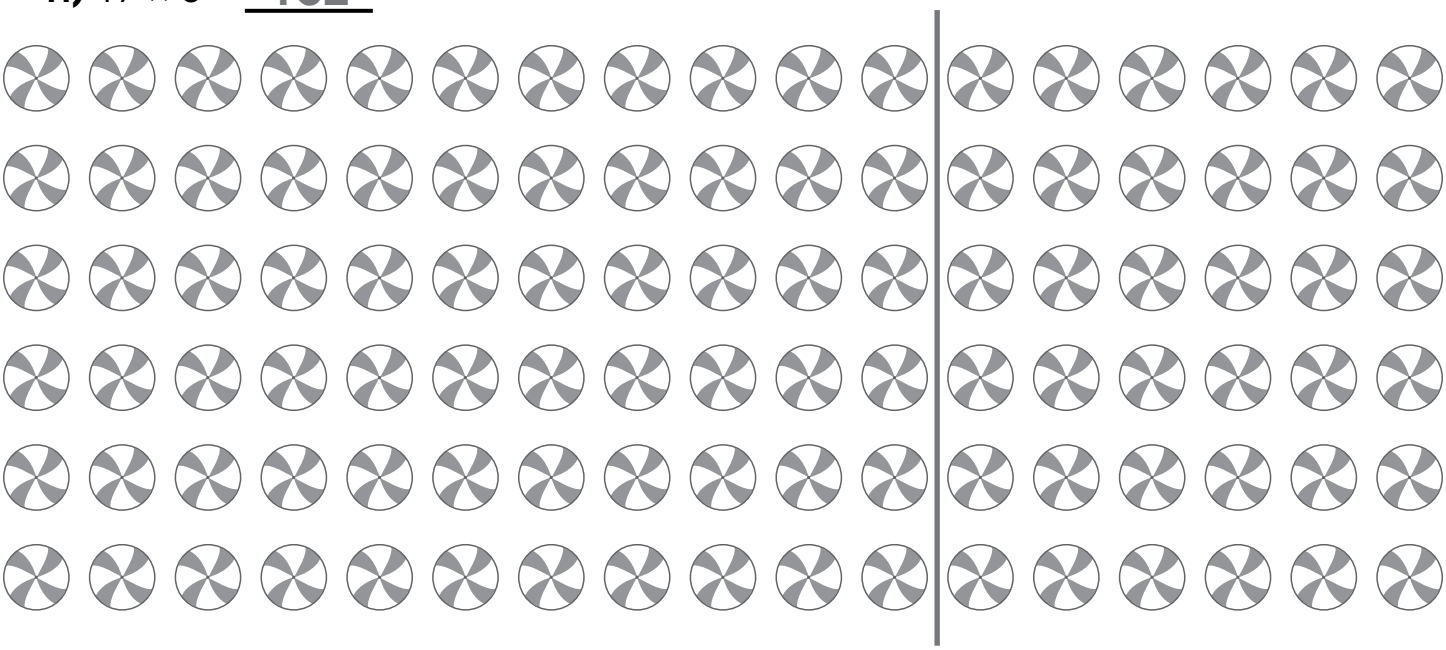
C



D



1.) 17 × 6 = 102

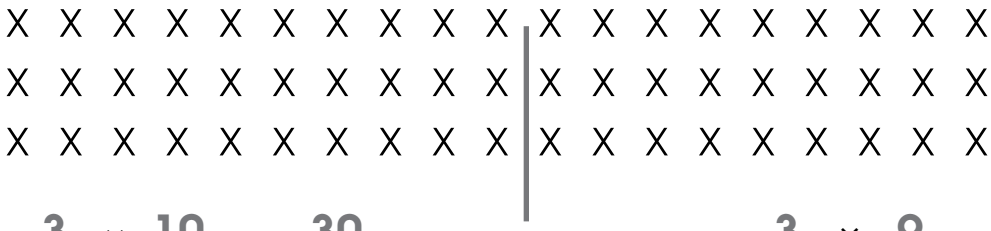


10 × 6 = 60 7 × 6 = 42

60 × 42 = 102

17 × 6 = 102

2.) 3 × 19 = 57

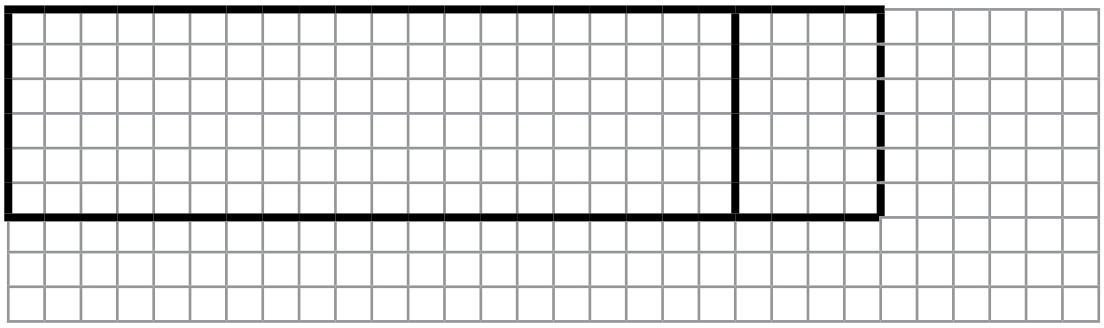


3 × 10 = 30 3 × 9 = 27

30 × 27 = 57

3 × 19 = 57

3.) Estimate the area. Use the partial-products method to solve.



Estimate:

24 × 6

↓ ↓

20 × 10 = 200

Partial-Products Method:

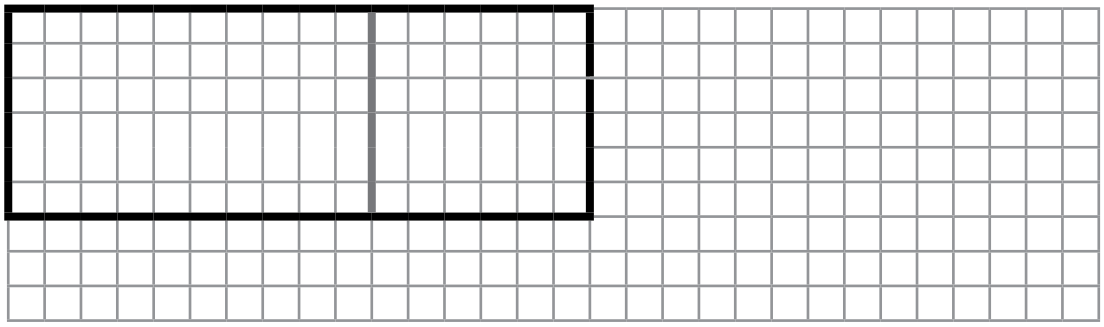
24 × 6

20 × 6 = 120 4 × 6 = 24

120 + 24 = 144

24 × 6 = 144

4.) Draw a line to show the partial products. Label the new rectangles.



Estimate:

16 × 6

↓ ↓

20 × 6 = 120

Partial-Products Method:

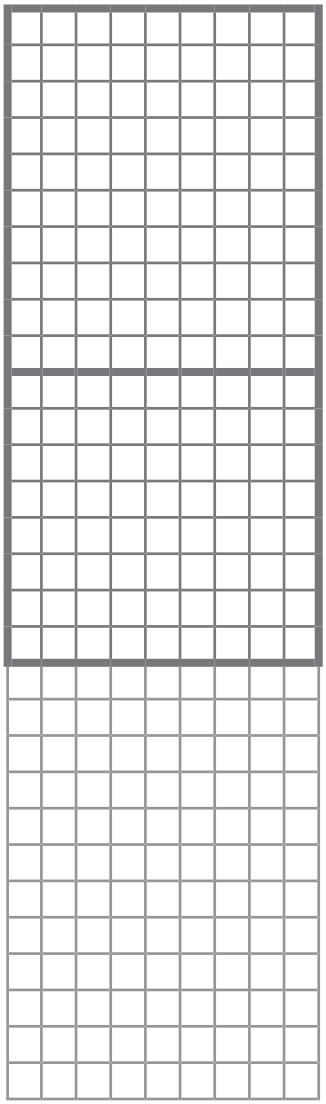
16 × 6

10 × 6 = 60 6 × 6 = 36

60 + 36 = 96

16 × 6 = 96

5.) Draw an area model and then break apart to solve.



Estimate:

18 × 9

↓ ↓

20 × 10 = 200

Partial-Products Method:

18 × 9

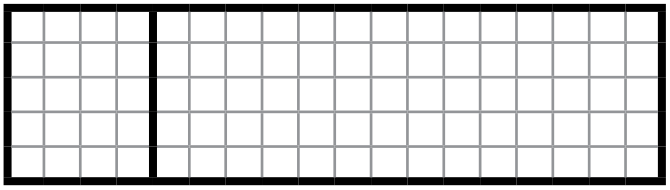
10 × 9 = 90 8 × 9 = 72

90 + 72 = 162

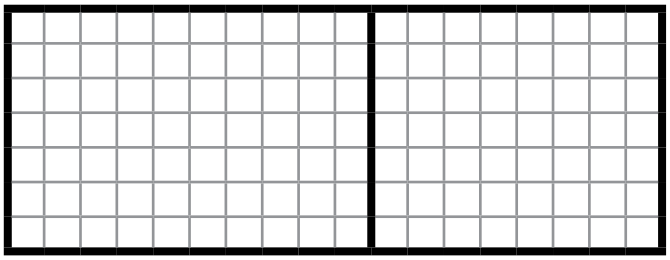
18 × 9 = 162

6.) For her birthday party, Phuynh wants to give a set of stickers to her friends as party favors. Each set contains 18 stickers. If she has 7 friends coming, how many stickers will she need? Choose the correct area model that represents the partial products method to solve.

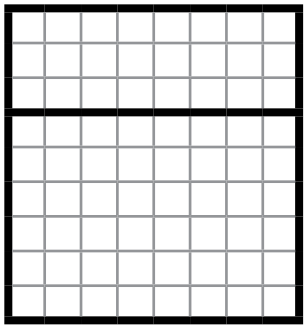
A



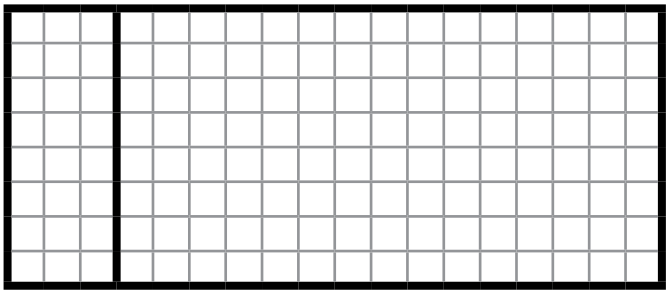
B



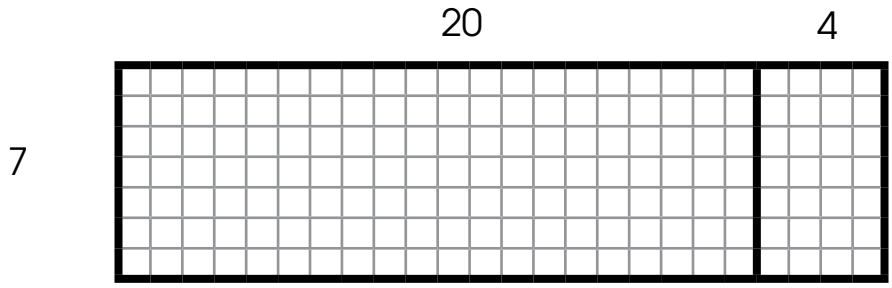
C



D



24 × 7



20 × 7 = 1,400 4 × 7 = 28

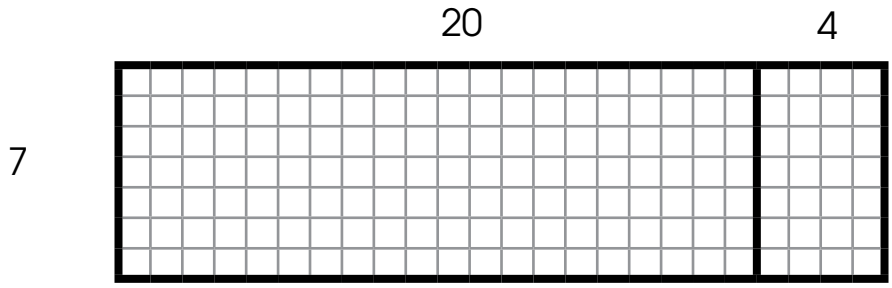
1,400 + 28 - 1,428

24 × 7

↓ ↓

____ × ____ = ____

24 × 7



20 × 7 = 1,400 4 × 7 = 28

1,400 + 28 - 1,428

24 × 7

↓ ↓

____ × ____ = ____

Partial-Products Method

39 × 4

Step 1.) Estimate an answer.

_____ × _____ = _____

Step 2.) Break apart a factor into tens and ones.

(_____ + _____) × 4

Step 3.) Multiply by the other factor.

_____ × 4 = _____

_____ × 4 = _____

Step 4.) Add the partial products.

_____ + _____ = _____

39 × 4 = _____

Jaime practiced his math facts every day for 8 days. He solved 24 facts each day. How many math facts did he solve in 8 days?

Jaime's work:

$$\begin{array}{r} 24 \\ \times\ \ 8 \\ \hline 32 \\ +\ 16 \\ \hline 48 \end{array}$$

Partial-Products Method

39 × 4

Step 1.) Estimate an answer.

_____ × _____ = _____

Step 2.) Break apart a factor into tens and ones.

(_____ + _____) × 4

Step 3.) Multiply by the other factor.

_____ × 4 = _____

_____ × 4 = _____

Step 4.) Add the partial products.

_____ + _____ = _____

39 × 4 = _____

Jaime practiced his math facts every day for 8 days. He solved 24 facts each day. How many math facts did he solve in 8 days?

Jaime's work:

$$\begin{array}{r} 24 \\ \times\ \ 8 \\ \hline 32 \\ +\ 16 \\ \hline 48 \end{array} \qquad \begin{array}{r} 20 \\ \times\ \ 8 \\ \hline 160 \end{array} \qquad \begin{array}{r} 4 \\ \times\ 8 \\ \hline 32 \end{array}$$

160 + 32 = 192

$$\begin{array}{r} 24 \\ \times\ \ 8 \\ \hline \end{array}$$

192 math facts

Partial-Products Method

Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Solve using the partial-products method.

1.) 56 × 3

↓ ↓

_____ × _____ = _____

(_____ + _____) × 3

_____ × 3 = _____ _____ × 3 = _____

_____ + _____ = _____

56 × 3 = _____

2.) 23 × 5

↓ ↓

_____ × _____ = _____

(_____ + _____) × 5

_____ × 5 = _____ _____ × 5 = _____

_____ + _____ = _____

23 × 5 = _____

3.)

$$\begin{array}{r} 28 \\ \times\ 7 \\ \hline \end{array} \rightarrow \begin{array}{r} \_\_\_ \\ \times\ \_\_ \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 7 \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 7 \\ \hline \end{array}$$

____ + ____ = ____

4.)

$$\begin{array}{r} 51 \\ \times\ 9 \\ \hline \end{array} \rightarrow \begin{array}{r} \_\_\_ \\ \times\ \_\_ \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 9 \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 9 \\ \hline \end{array}$$

____ + ____ = ____

Partial-Products Method

Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Solve using the partial-products method.

1.) 56 × 3

↓ ↓

_____ × _____ = _____

(_____ + _____) × 3

_____ × 3 = _____ _____ × 3 = _____

_____ + _____ = _____

56 × 3 = _____

2.) 23 × 5

↓ ↓

_____ × _____ = _____

(_____ + _____) × 5

_____ × 5 = _____ _____ × 5 = _____

_____ + _____ = _____

23 × 5 = _____

3.)

$$\begin{array}{r} 28 \\ \times\ 7 \\ \hline \end{array} \rightarrow \begin{array}{r} \_\_\_ \\ \times\ \_\_ \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 7 \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 7 \\ \hline \end{array}$$

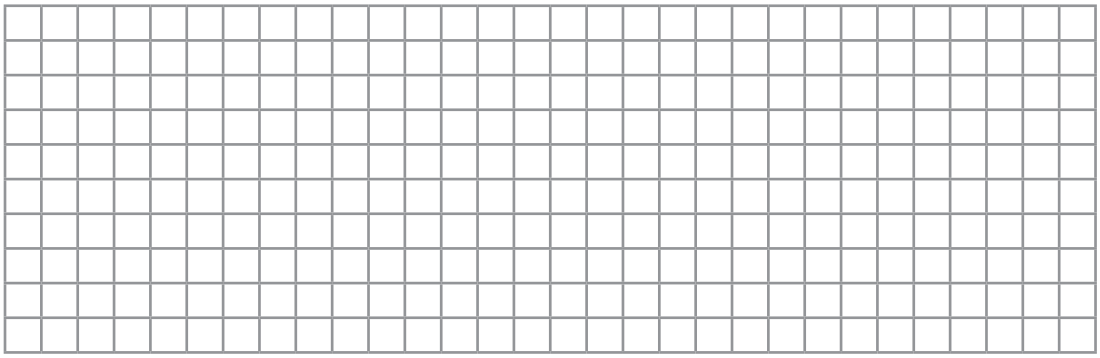
____ + ____ = ____

4.)

$$\begin{array}{r} 51 \\ \times\ 9 \\ \hline \end{array} \rightarrow \begin{array}{r} \_\_\_ \\ \times\ \_\_ \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 9 \\ \hline \end{array} \qquad \begin{array}{r} \_\_\_ \\ \times\ 9 \\ \hline \end{array}$$

____ + ____ = ____

1.) Draw a 23 × 8 area model on the grid below.



2.) Break apart the area model into tens and ones. Label the new rectangles with the correct multiplication sentence.

Estimate the answer.

3.) 48 × 6

↓ ↓

____ × ____ = _____

Solve using the partial-products method.

4.)

84 →	____	____	____
× 5 →	× 5	× 5	× 5

____ + ____ = ____

Solve using the partial-products method.

5.) 34 × 4

↓ ↓

_____ × _____ = _____

(_____ + _____) × 4

_____ × 4 = _____ _____ × 4 = _____

_____ + _____ = _____

34 × 4 = _____

6.) 19 × 8

↓ ↓

_____ × _____ = _____

(_____ + _____) × 8

_____ × 8 = _____ _____ × 8 = _____

_____ + _____ = _____

19 × 8 = _____

Choose the correct answer.

7.) Maria's school was selling rolls of wrapping paper for a school fundraiser. Her goal was to sell 150 rolls over the 3-day weekend. She sold 48 rolls each day. Did Maria meet her goal?

A 48 × 3 = 144

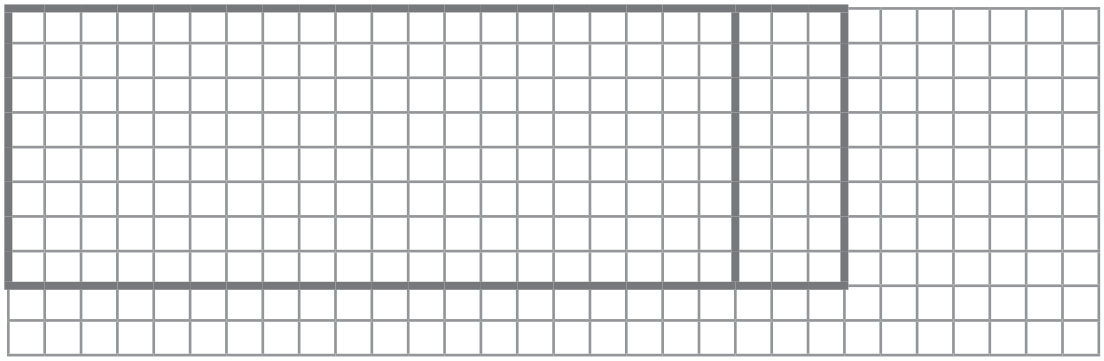
B 40 × 3 = 120

C 8 × 3 = 24

D 120 × 24 = 144

STOP

1.) Draw a 23 × 8 area model on the grid below.



2.) Break apart the area model into tens and ones. Label the new rectangles with the correct multiplication sentence.

Estimate the answer.

3.) 48 × 6

↓ ↓

____ × ____ = _____

Solve using the partial-products method.

4.)

84 →	____	____	____
× 5 →	× 5	× 5	× 5
_____	_____	_____	_____

____ + ____ = ____

Solve using the partial-products method.

5.) 34 × 4

↓ ↓

____ × ____ = ____

(____ + ____) × 4

____ × 4 = ____ ____ × 4 = ____

____ + ____ = ____

34 × 4 = ____

6.) 19 × 8

↓ ↓

____ × ____ = ____

(____ + ____) × 8

____ × 8 = ____ ____ × 8 = ____

____ + ____ = ____

19 × 8 = ____

Choose the correct answer.

7.) Maria's school was selling rolls of wrapping paper for a school fundraiser. Her goal was to sell 150 rolls over the 3-day weekend. She sold 48 rolls each day. Did Maria meet her goal?

A 48 × 3 = 144

B 40 × 3 = 120

C 8 × 3 = 24

D 120 × 24 = 144

25 × 7

↓ ↓

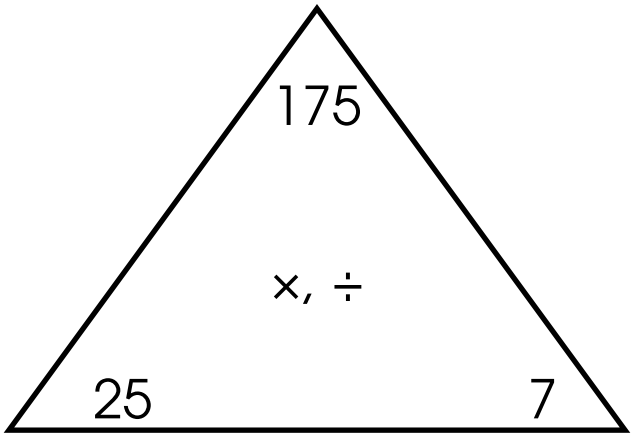
Estimate: _____ × _____ = _____

(_____ + _____) × 7

_____ × _____ = _____ _____ × _____ = _____

_____ + _____ = _____

25 × 7 = _____



25 × 7 = 175

7 × 25 = 175

175 ÷ 7 = _____

_____

Mr. Perez gave his 36 students 2 facts. It was the students' job to decide if the facts were corresponding or not and then write out the rest of the corresponding facts for the number family.

The first group of students were given the facts $45 \times 9 = 405$ and $405 \div 15 = 27$. This group said the facts were corresponding because both facts had 405 as 1 of the numbers. The additional corresponding facts they wrote were $9 \times 45 = 405$ and $405 \div 27 = 15$.

Are the students correct?

25 × 7

Estimate: 20 × 10 = 200

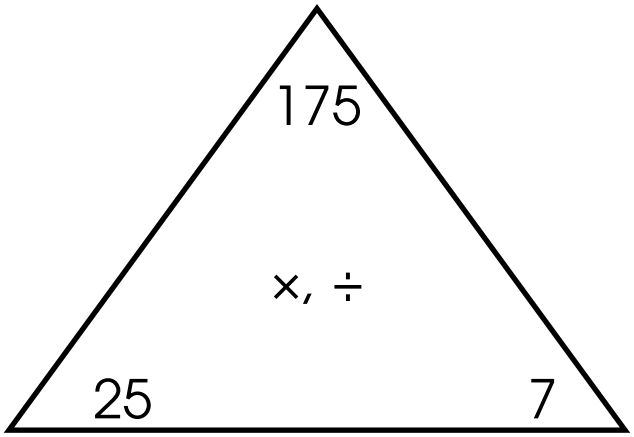
30 7 210

(20 + 5) × 7

20 × 7 = 140 5 × 7 = 35

140 + 35 = 175

25 × 7 = 175



25 × 7 = 175

7 × 25 = 175

175 ÷ 7 = 25

175 ÷ 25 = 7

Mr. Perez gave his 36 students 2 facts. It was the students' job to decide if the facts were corresponding or not and then write out the rest of the corresponding facts for the number family.

The first group of students were given the facts $45 \times 9 = 405$ and $405 \div 15 = 27$. This group said the facts were corresponding because both facts had 405 as 1 of the numbers. The additional corresponding facts they wrote were $9 \times 45 = 405$ and $405 \div 27 = 15$.

Are the students correct? **No**

$405 \div 9 = 45$

$405 \div 45 = 9$

$15 \times 27 = 405$

$27 \times 15 = 405$

Match the corresponding facts.

1.) 28 × 8 = 224	56 × 4 = 224
2.) 336 ÷ 6 = 56	4 × 7 = 28
3.) 28 ÷ 4 = 7	56 × 6 = 336
4.) 224 ÷ 56 = 4	8 × 28 = 224

Partial-Products Method

Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Estimate and use the partial-products method to solve.

5.) 16 × 4 = _____

6.) 4 × 16 = _____

Write the two related division sentences for the multiplication problems above.

7.) _____

8.) _____

From the division sentence, write the two related multiplication sentences.

$$216 \div 8 = 27$$

9.) _____ **10.)** _____

Match the corresponding facts.

1.) 28 × 8 = 224

2.) 336 ÷ 6 = 56

3.) 28 ÷ 4 = 7

4.) 224 ÷ 56 = 4

56 × 4 = 224

4 × 7 = 28

56 × 6 = 336

8 × 28 = 224

Partial-Products Method

Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Estimate and use the partial-products method to solve.

5.) 16 × 4 = 64

20 × 4 = 80

10 × 4 = 40 6 × 4 = 24

40 + 24 = 64

6.) 4 × 16 = 64

Write the two related division sentences for the multiplication problems above.

7.) 64 ÷ 4 = 16

8.) 64 ÷ 16 = 4

From the division sentence, write the two related multiplication sentences.

$$216 \div 8 = 27$$

9.) 27 × 8 = 216

10.) 8 × 27 = 216

Partial-Products Method

Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Estimate and use the partial-products method to solve.

1.)
$$\begin{array}{r} 32 \\ \times\ 8 \\ \hline \end{array}$$

2.)
$$\begin{array}{r} 8 \\ \times\ 32 \\ \hline \end{array}$$

3.) 72 × 4

↓ ↓

_____ × _____ = _____

(_____ + _____) × 4

_____ × 4 = _____ _____ × 4 = _____

_____ + _____ = _____

72 × 4 = _____

Write the two related division facts for the multiplication facts above.

4.) _____ **5.)** _____

List the two multiplication facts and the two division facts for 5, 27, and 135.

6.) _____ **7.)** _____

8.) _____ **9.)** _____

10.) Victor has 4 boxes of sour candy. Each box has 36 candies in it. How many candies does Victor have altogether in his 4 boxes?

A
4×36
$(4 \times 30) + (4 \times 6)$
$120 + 24$
144 candies

C
4×42
$(4 \times 40) + (4 \times 2)$
$160 + 8$
168 candies

B
$4 + 36$
40 candies

D
$36 \div 4$
9 candies

Partial-Products Method

Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Estimate and use the partial-products method to solve.

1.)

$$\begin{array}{r} 32 \\ \times\ 8 \\ \hline \end{array} \qquad \begin{array}{r} 30 \\ \times\ 8 \\ \hline 240 \end{array} \qquad \begin{array}{r} 2 \\ \times\ 8 \\ \hline 16 \end{array}$$

240 + 16 = 256

2.)

$$\begin{array}{r} 8 \\ \times\ 32 \\ \hline 256 \end{array}$$

3.) 72 × 4

↓ ↓

70 × 4 = 280

(70 + 2) × 4

70 × 4 = 280 2 × 4 = 8

280 + 8 = 288

72 × 4 = 288

Write the two related division facts for the multiplication facts above.

4.) 431 ÷ 63 = 7

5.) 431 ÷ 7 = 63

List the two multiplication facts and the two division facts for 5, 27, and 135.

6.) 5 × 27 = 135

7.) 27 × 5 = 135

8.) 135 ÷ 5 = 27

9.) 135 ÷ 27 = 5

10.) Victor has 4 boxes of sour candy. Each box has 36 candies in it. How many candies does Victor have altogether in his 4 boxes?

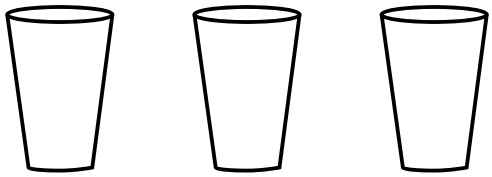
A
4 × 36
(4 × 30) + (4 × 6)
120 + 24
144 candies

C
4 × 42
(4 × 40) + (4 × 2)
160 + 8
168 candies

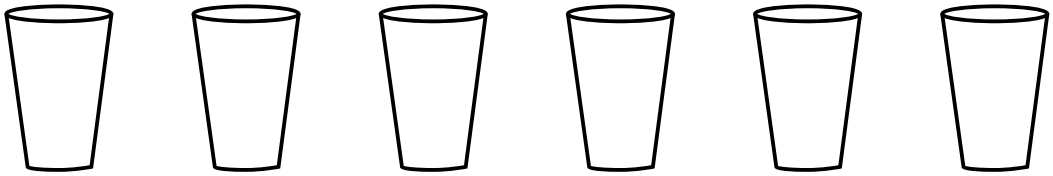
B
4 + 36
40 candies

D
36 ÷ 4
9 candies

Lauren was asked to fill 3 cups with ice cubes at the lemonade stand. She counted 18 ice cubes in her bucket. If Lauren places the same number of cubes in each cup, how many ice cubes will be in each cup?

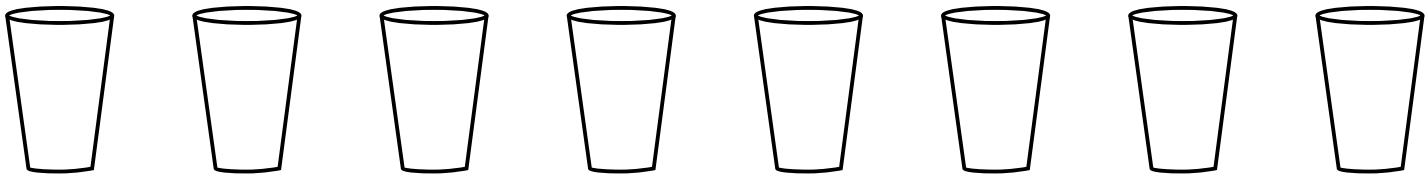


_____	÷	_____	=	_____	_____
Total		Cups		Equal Share	Left Over



_____ ÷ _____ = _____ _____

Total Cups Equal Share Left Over

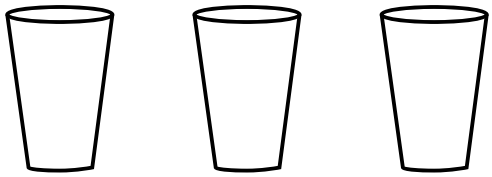


_____ ÷ _____ = _____ _____

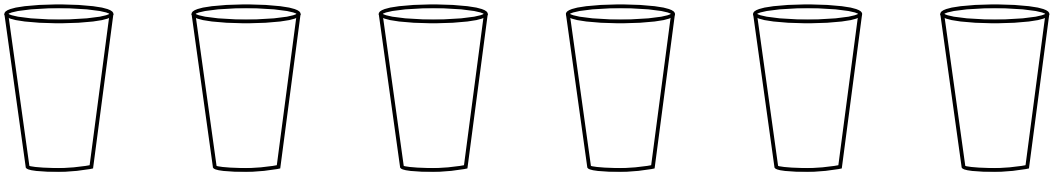
Total Cups Equal Share Left Over

STOP

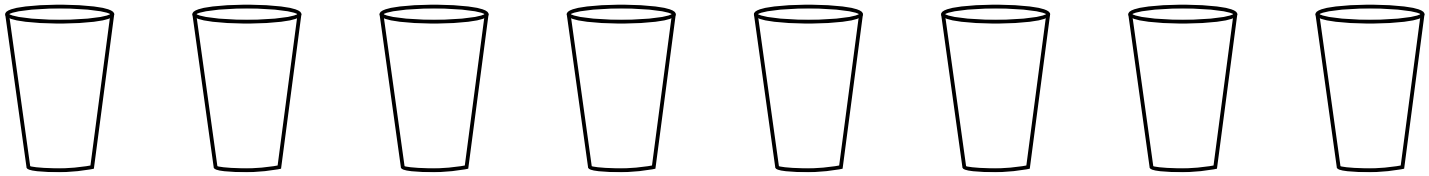
Lauren was asked to fill 3 cups with ice cubes at the lemonade stand. She counted 18 ice cubes in her bucket. If Lauren places the same number of cubes in each cup, how many ice cubes will be in each cup?



18	÷	3	=	6	0
Total		Cups		Equal Share	Left Over



18	÷	6	=	3	0
Total		Cups		Equal Share	Left Over



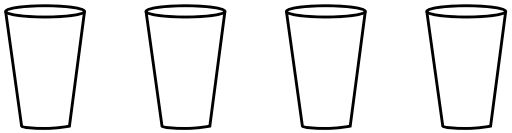
18	÷	8	=	2	2
Total		Cups		Equal Share	Left Over

STOP

Use 20 base-10 ones to solve.

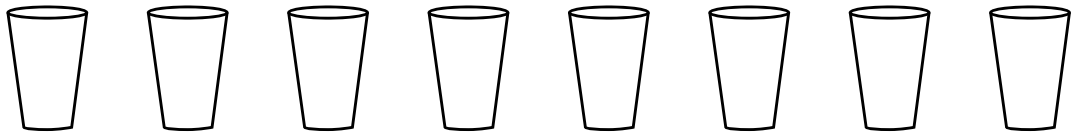
1.) 20 ÷ _____ = _____ _____

Total Cups Equal Share Left Over



2.) 20 ÷ _____ = _____ _____

Total Cups Equal Share Left Over

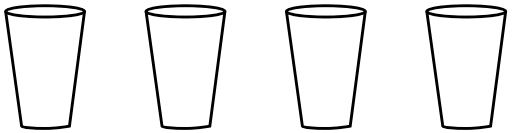


STOP

Use 20 base-10 ones to solve.

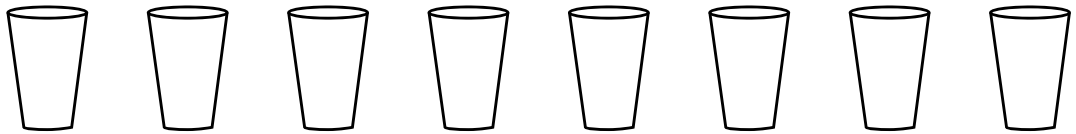
1.) 20 ÷ 4 = 5 0

Total	Cups	Equal Share	Left Over



2.) 20 ÷ 8 = 2 4

Total	Cups	Equal Share	Left Over



STOP

Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Estimate and solve using the partial-products method.

1.)
$$\begin{array}{r} 37 \\ \times\ \ 4 \\ \hline \end{array}$$

Write the related division sentence for the multiplication problem above.

2.) _____

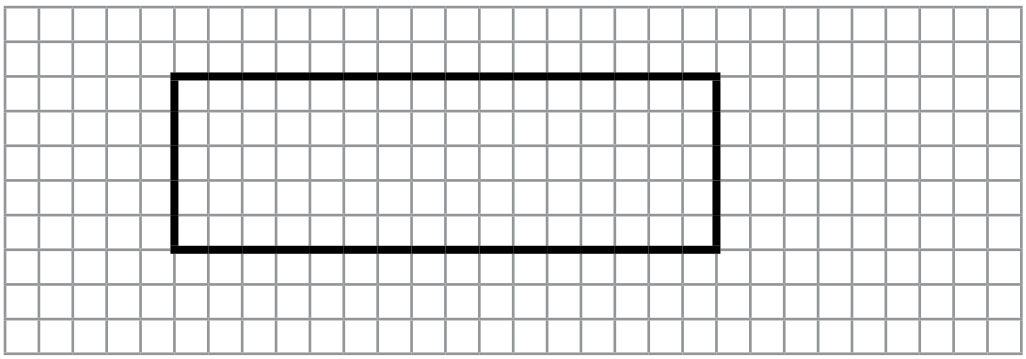
Estimate an answer.

3.) 68 × 7

_____ × _____ = _____

Draw a line to show the partial products. Label the new rectangles.

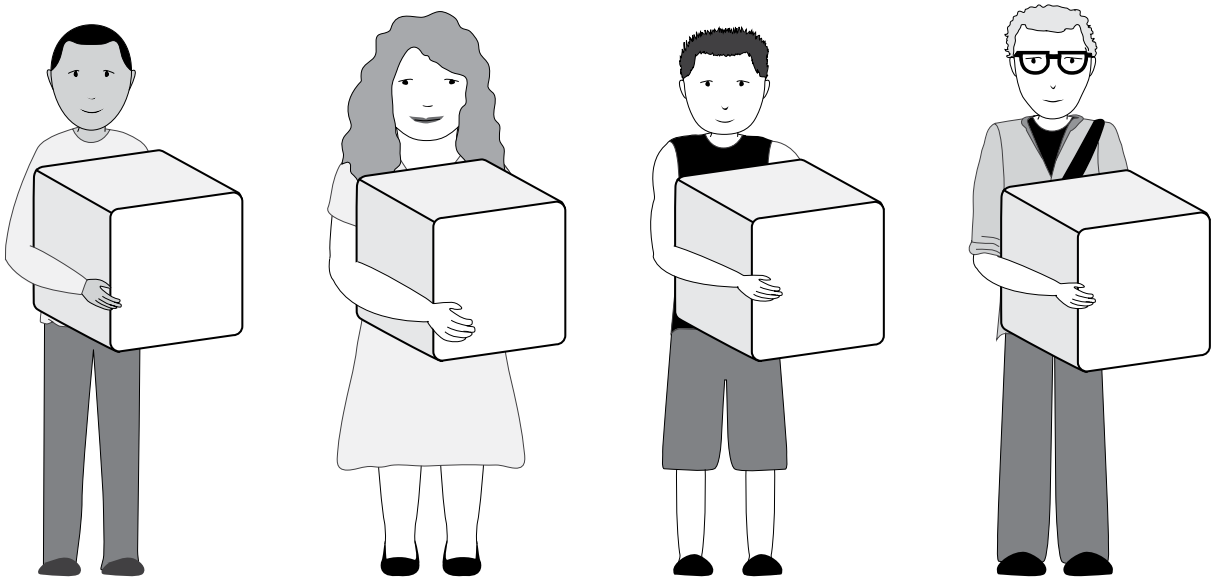
4.) 16 × 5



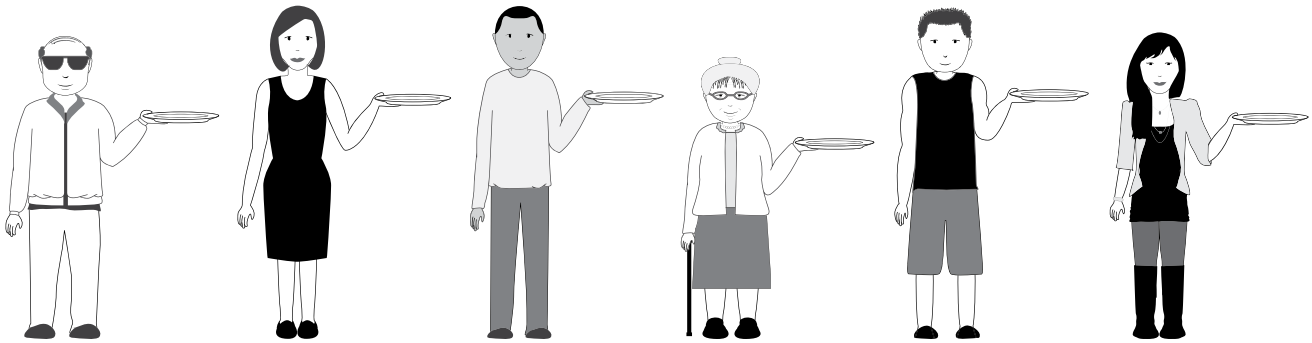
Use base-10 ones to solve.

5.) 19 ÷ _____ = _____ _____

Total People Equal Share Left Over



6.) 19 ÷ _____ = _____ _____



Step 1.) Estimate an answer.

Step 2.) Break apart a factor into tens and ones.

Step 3.) Multiply by the other factor.

Step 4.) Add the partial products to find the total.

Estimate and solve using the partialproducts method.

1.)

$$\begin{array}{r} 37 \\ \times\ \ 4 \\ \hline \end{array} \longrightarrow \begin{array}{r} 30 \\ \times\ \ 4 \\ \hline 120 \end{array} \qquad \begin{array}{r} 7 \\ \times\ 4 \\ \hline 28 \end{array}$$

$$120 + 28 = 148$$

Write the related division sentence for the multiplication problem above.

2.) 148 ÷ 37 = 4 or 148 ÷ 4 = 37

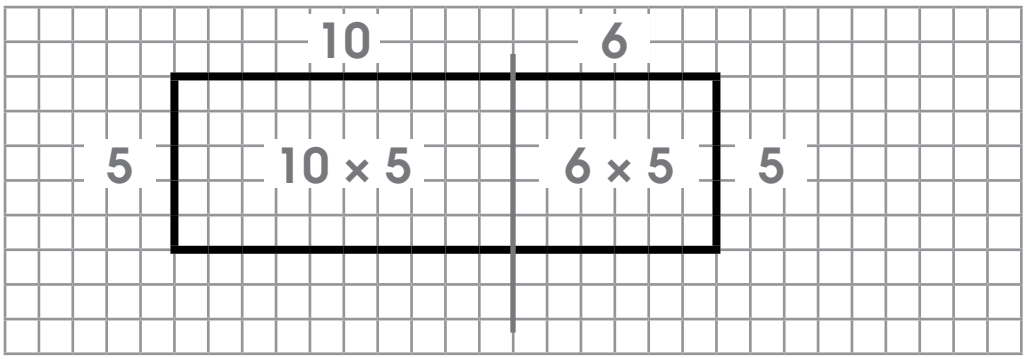
Estimate an answer.

3.) 68 × 7

70 × 10 = 490 or 65 × 10 = 650

Draw a line to show the partial products. Label the new rectangles.

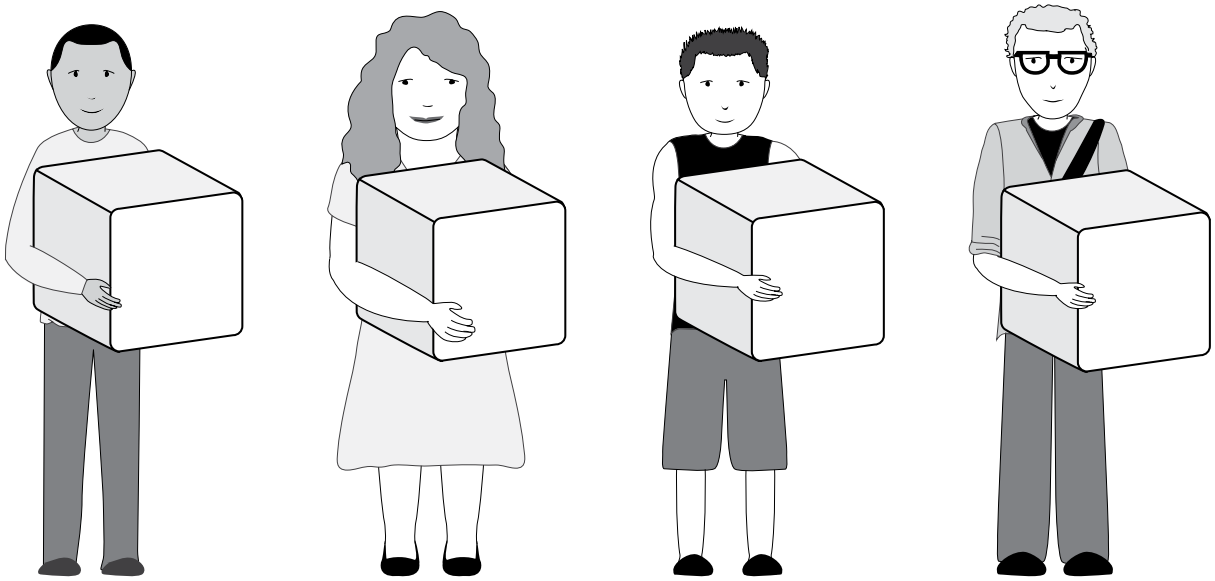
4.) 16 × 5



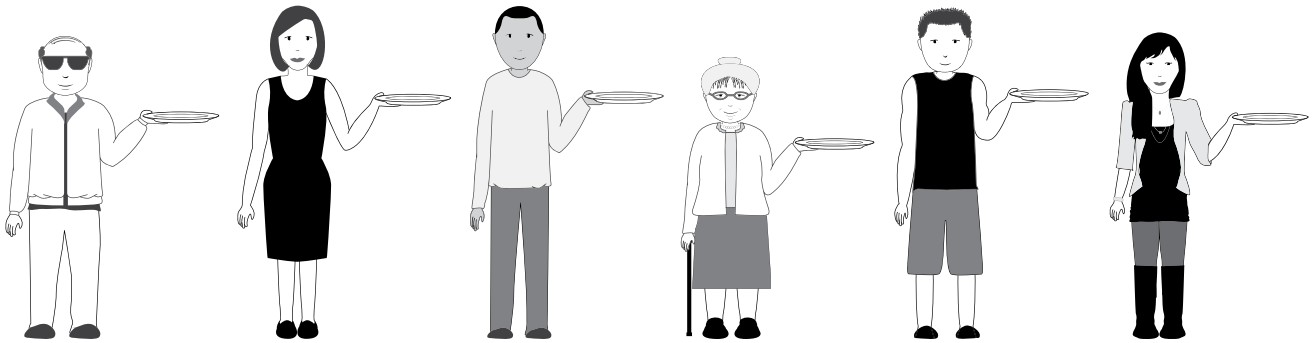
Use base-10 ones to solve.

5.) 19 ÷ 4 = 4 3

Total | People | Equal Share | Left Over



6.) 19 ÷ 6 = 3 1



Decompose or break apart the numbers into tens and ones.

98

tens ones

74

tens ones

56 = _____ _____
tens ones

87 = _____ _____
tens ones

_____ _____ = 63
tens ones

_____ _____ = 4
tens ones

Decompose or break apart the number into tens and ones.

98

9	8
tens	ones

74

7	4
tens	ones

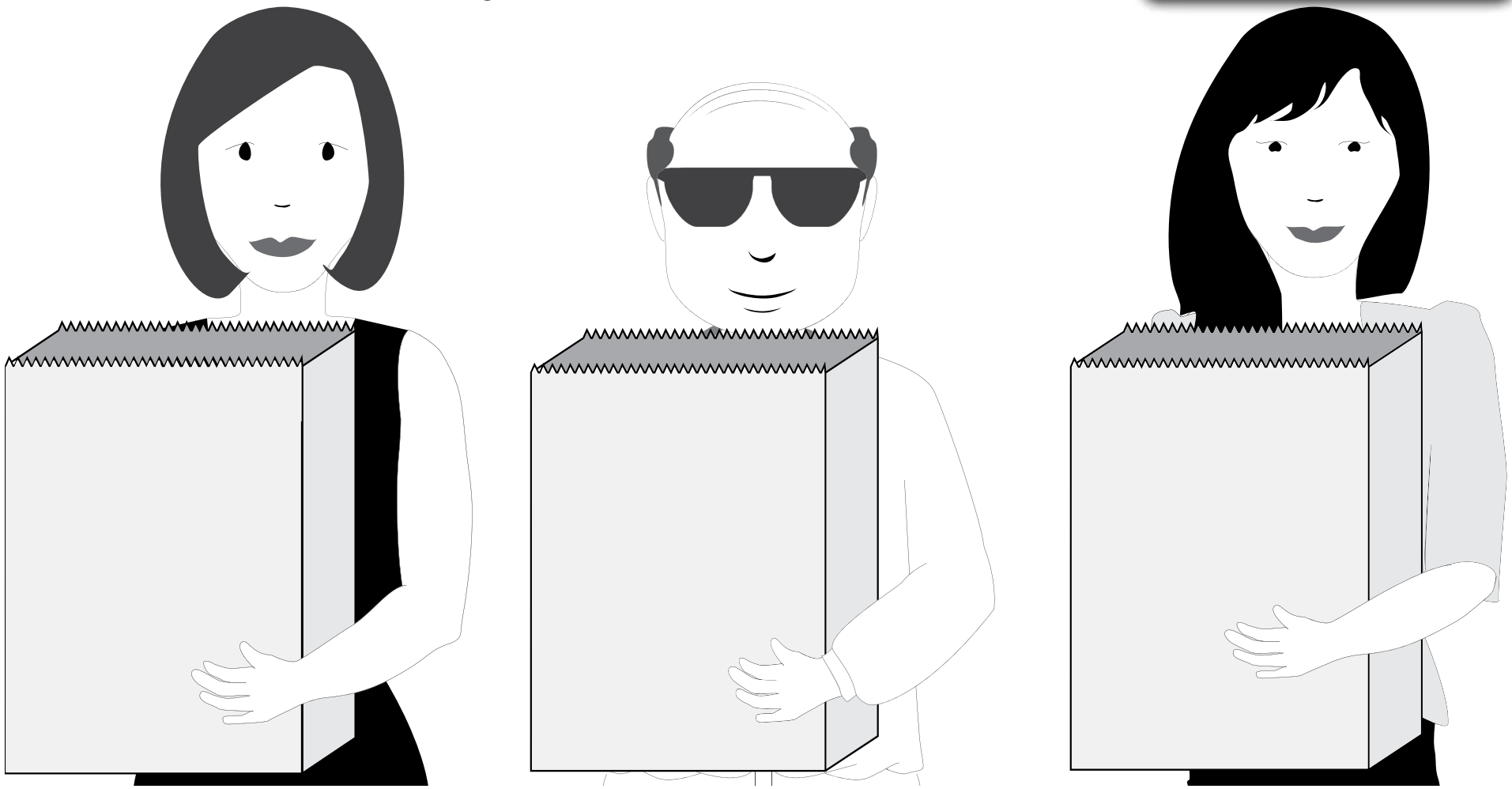
56 = 5 tens 6 ones

87 = 8 tens 7 ones

6 tens 3 ones = 63

0 tens 4 ones = 4

Equally share 43 marbles among 3 people.



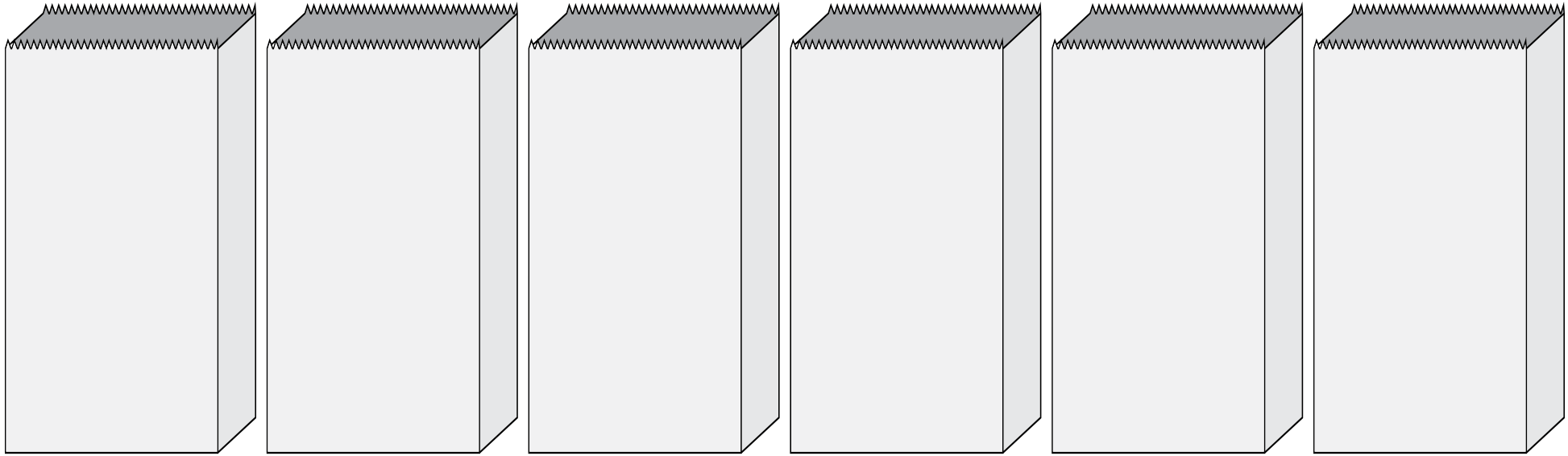
Total Tens	Total Ones	÷ # of People	= Tens Share	Ones Share	R Remainder

Total

Equal Share

Module MDWN
Lesson 10
Modeled Practice #2

Equally share 73 marbles among 6 bags.



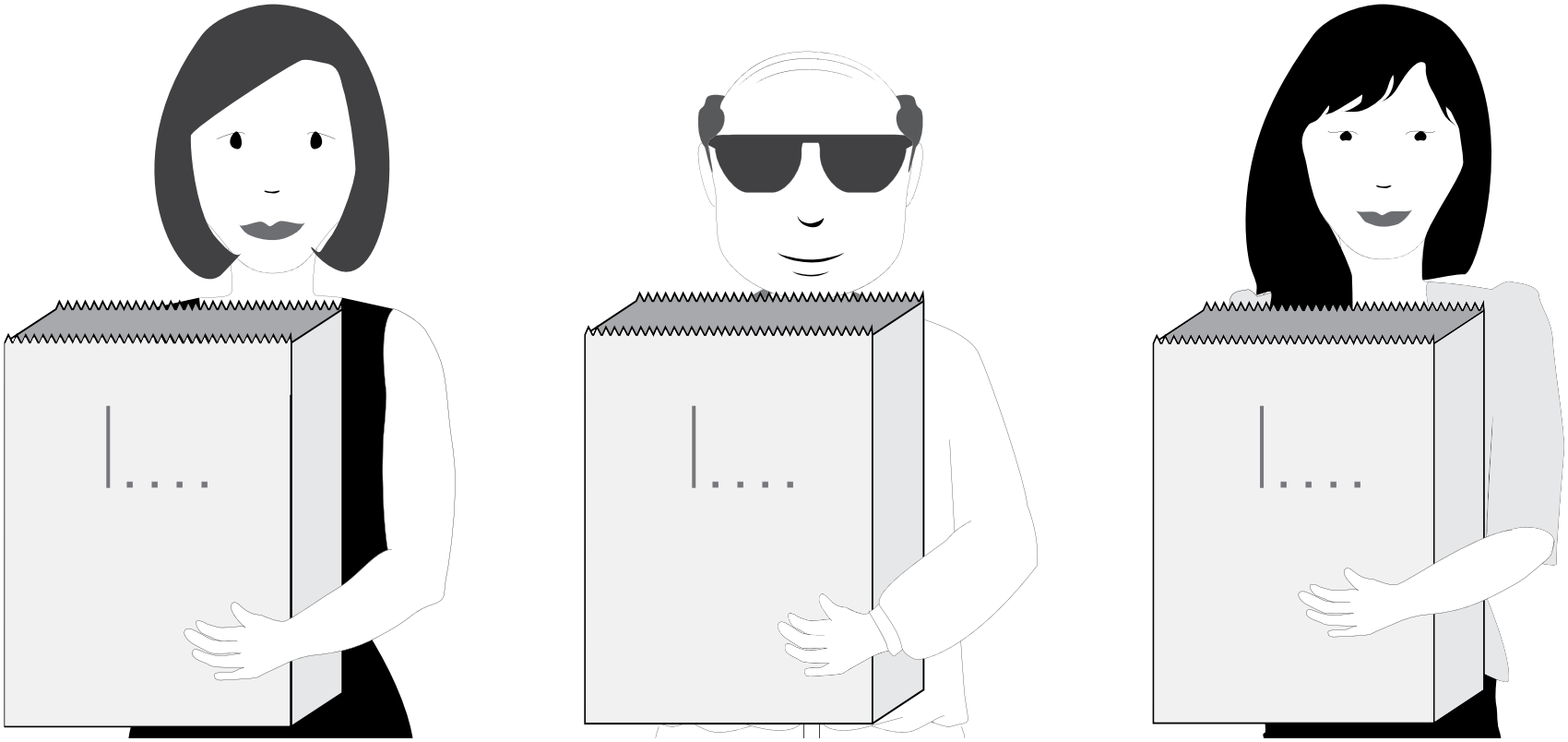
Total Tens	Total Ones	÷	Divisor (# of Bags)	=	Tens Share	Ones Share	R	Remainder (Left Over)

Dividend (Total) Quotient (Equal Share)

STOP

Module MDWN
Lesson 10
Modeled Practice #1 Key

Equally share 43 marbles among 3 people.

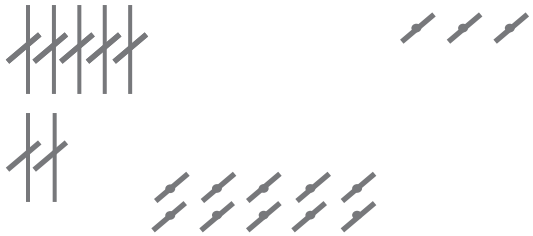


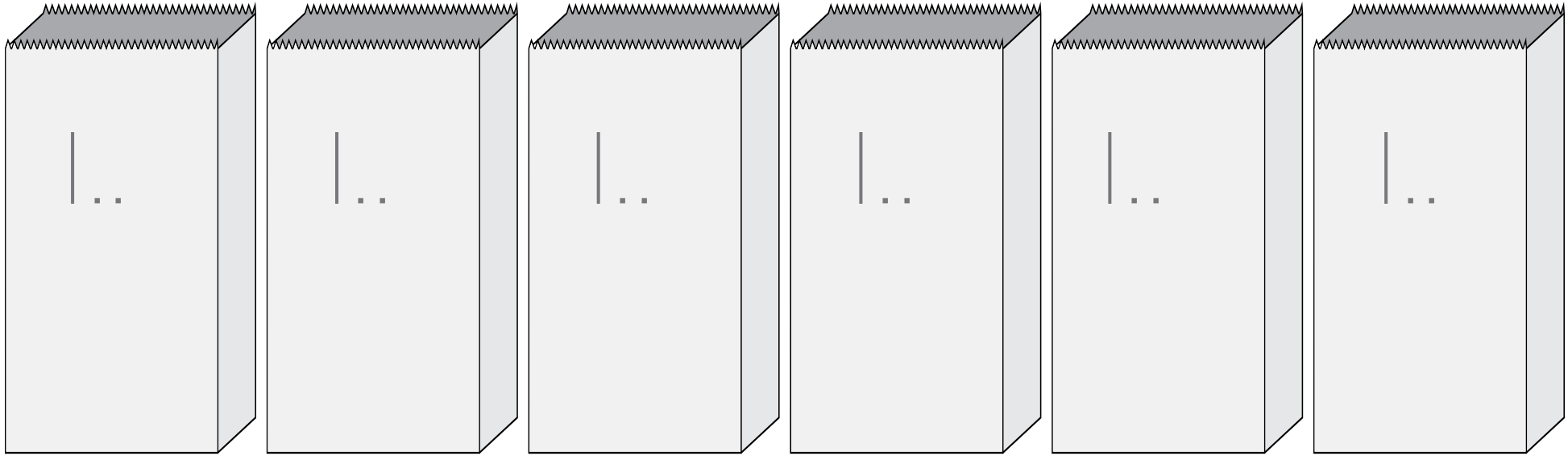
4 Total Tens, 3 Total Ones = 43 Total

÷ 3 # of People = 1 Tens Share, 4 Ones Share = 14 Equal Share

R 1 Remainder

Equally share 73 marbles among 6 bags.





7 Total Tens | 3 Total Ones ÷ 6 Divisor (# of Bags) = 1 Tens Share | 2 Ones Share | R 1 Remainder (Left Over)

73 Dividend (Total)

12 Quotient (Equal Share)

STOP

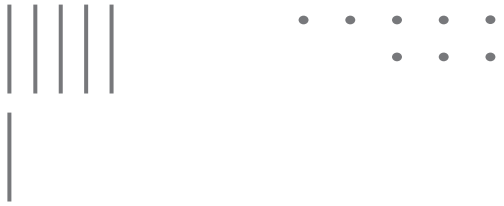
Draw base-10 materials to solve.

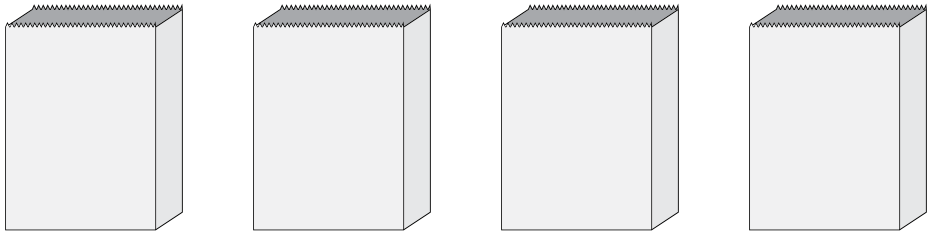
1.) Janice filled 6 baskets with equal amounts of biscuits. She had 74 biscuits to share among the baskets. How many biscuits did Janice place in each basket?

____	____	÷	____	=	____	____	R ____
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder
Dividend					Quotient		

Use the base-10 pictures to solve.

2.)





_____	_____	÷	_____	=	_____	_____	R _____
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

Dividend (Total) _____ Quotient (Equal Share) _____

Draw base-10 picture to solve.

3.) Equally share 38 marbles among 3 people.

_____	_____	÷	_____	=	_____	_____	R _____
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

_____ Dividend

_____ Quotient (Equal Share)

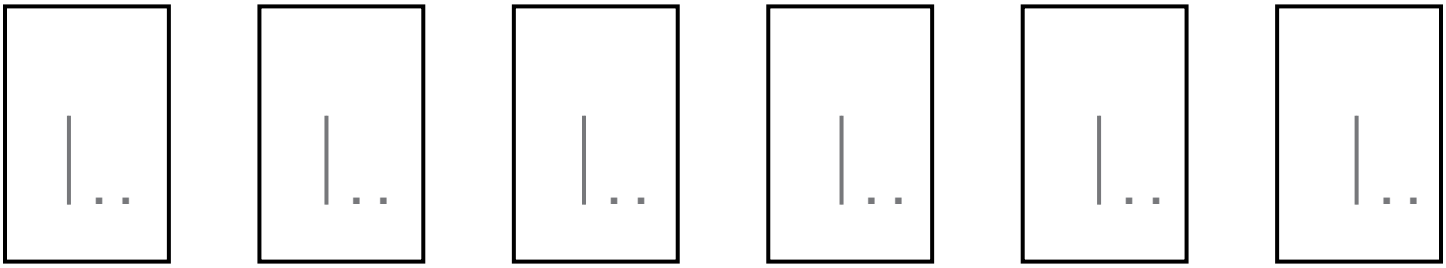
Draw base-10 materials to solve.

1.) Janice filled 6 baskets with equal amounts of biscuits. She had 74 biscuits to share among the baskets. How many biscuits did Janice place in each basket?

7	4	÷	6	=	1	2	R	2
Total Tens	Total Ones		Divisor		Tens Share	Ones Share		Remainder

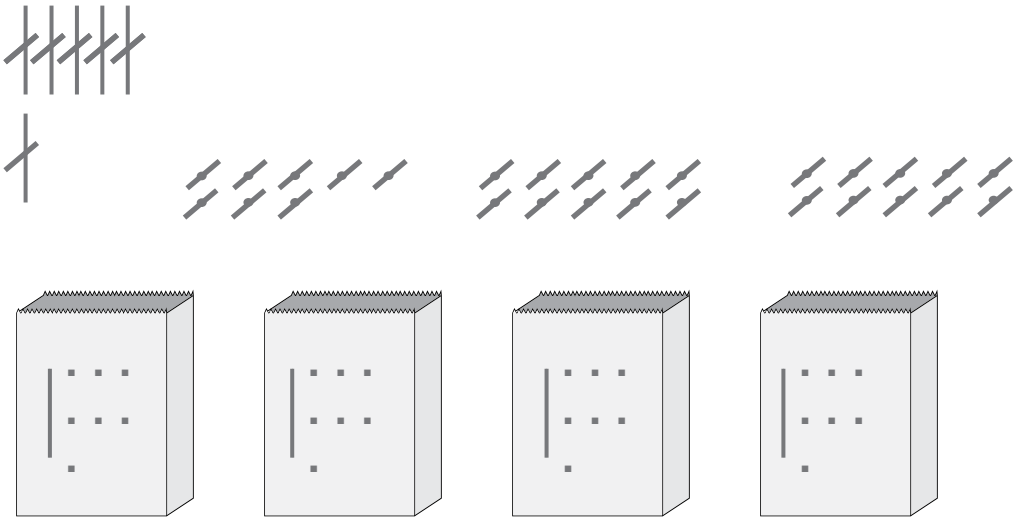
74 Dividend

12 Quotient



Use the base-10 pictures to solve.

2.)



6 Total Tens | 8 Total Ones ÷ 4 Divisor = 1 Tens Share | 7 Ones Share | R 0 Remainder (Left Over)

68 Dividend (Total)

17 Quotient (Equal Share)

Draw base-10 pictures to solve.

3.) Equally share 38 marbles among 3 people.

3	8	÷	3	=	1	2	R	2
Total Tens	Total Ones		Divisor		Tens Share	Ones Share		Remainder (Left Over)

38
Dividend

12
Quotient (Equal Share)

Use tens and ones to solve.

1.) Equally share 52 marbles among 4 customers.

_____	_____	÷	_____	=	_____	_____	R _____
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

_____ Dividend (Total)

_____ Quotient (Equal Share)

Write the division problem for the situations below.

2.) 36 acorns and 9 squirrels

Division problem: _____ ÷ _____
Total Squirrels

3.) 39 acorns and 3 squirrels

Division problem: _____ ÷ _____
Total Squirrels

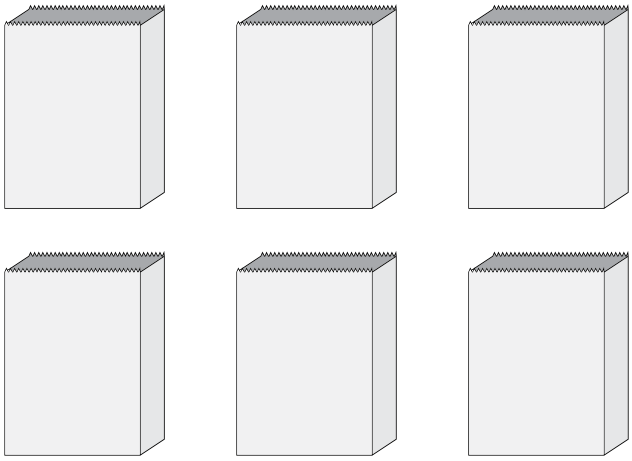
List a multiplication equation and a division equation for the number family 64, 8, and 512.

4.) _____

5.) _____

Use the base-10 picture to solve.

6.)



_____	_____	÷	_____	=	_____	_____	R _____
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

Dividend

Quotient (Equal Share)

Draw tens and ones to solve.

7.) Equally share 81 marbles between 5 people.

____	____	÷	____	=	____	____	R ____
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

Dividend ____ Quotient (Equal Share) ____

Use tens and ones to solve.

1.) Equally share 52 marbles among 4 customers.

5	2	÷	4	=	1	3	R 0
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

52 Dividend (Total)

13 Quotient (Equal Share)

Write the division problem for the situations below.

2.) 36 acorns and 9 squirrels

Division problem: 39 (Total) ÷ 9 (Squirrels)

3.) 39 acorns and 3 squirrels

Division problem: 39 (Total) ÷ 3 (Squirrels)

List a multiplication equation and a division equation for the number family 64, 8, and 512.

4.) 64 × 8 = 512

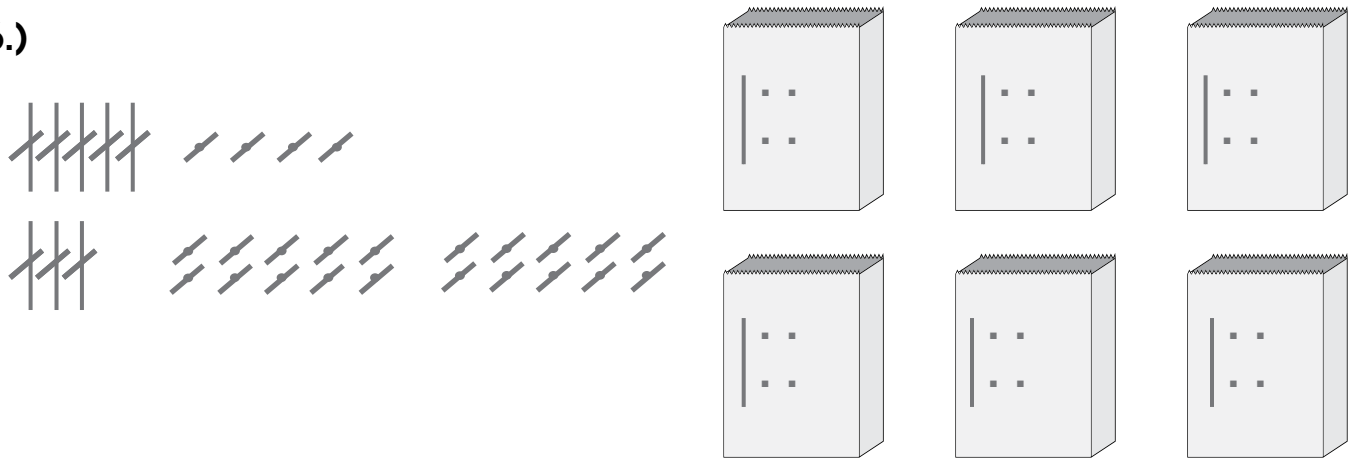
or 8 × 64 = 512

5.) 512 ÷ 8 = 64

or 512 ÷ 64 = 8

Use the base-10 picture to solve.

6.)



8	4	÷	6	=	1	4	R 0
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

84 Dividend

14 Quotient (Equal Share)

Draw tens and ones to solve.

7.) Equally share 81 marbles among 5 people.

8	1	÷	5	=	1	6	R 1
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder (Left Over)

81 Dividend

16 Quotient (Equal Share)

Complete using the multiplication table.

1.) List three multiples of 7: _____, _____, _____

2.) List three multiples of 3: _____, _____, _____

Write the division problem as a multiplication problem with the missing fact. Then solve.

3.) $54 \div 9 = n$

_____ × _____ = _____

n = _____

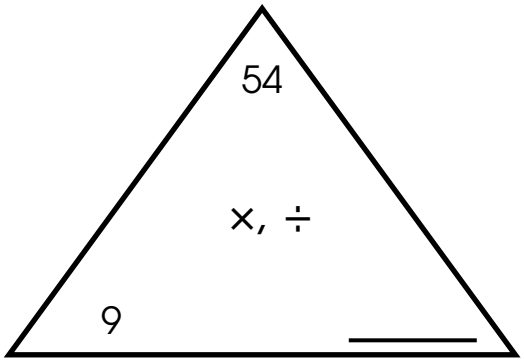
4.) $36 \div 6 = c$

_____ × _____ = _____

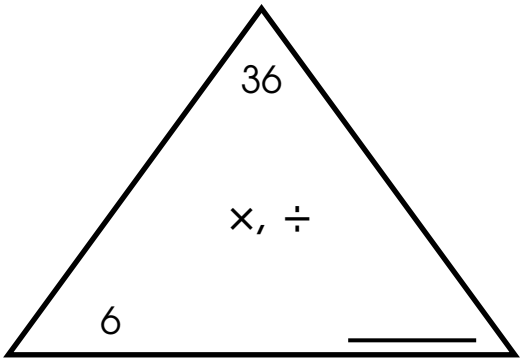
c = _____

Complete the number family triangle.

5.)



6.)



STOP

Complete using the multiplication table.

1.) List three multiples of 7: 7, 14, 21

2.) List three multiples of 3: 3, 6, 9

Write the division problem as a multiplication problem with the missing fact. Then solve.

3.) $54 \div 9 = n$

$n \times 9 = 54$

$n = 6$

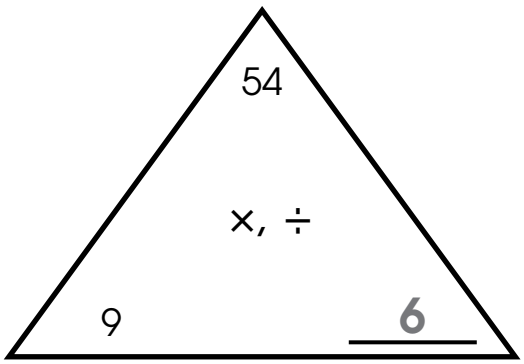
4.) $36 \div 6 = c$

$n \times 6 = 36$

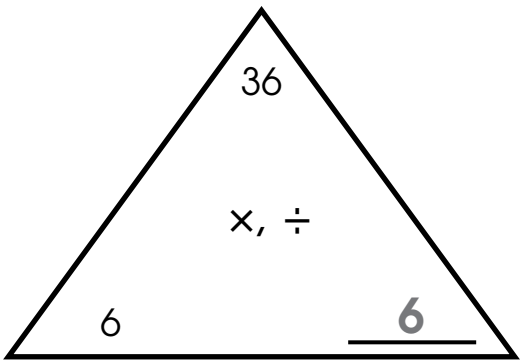
$c = 6$

Complete the number family triangle.

5.)



6.)



$30 \div 6 = n$ or $n \times 6 = 30$

$n =$ _____

$45 \div 5 = b$ or $b \times 5 = 45$

$b =$ _____

$34 \div 5$

Multiples of 5:

_____

Estimation: _____

_____

$34 \div 5 \approx$ _____
"is about"

STOP

$255 \div 4 = f$ or $f \times 4 = 255$

Multiples of 4:

_____

Estimation: _____

_____

_____

_____

$255 \div 4 \approx$ _____

"is about"

$30 \div 6 = n$ or $n \times 6 = 30$

$n =$ 5

$45 \div 5 = b$ or $b \times 5 = 45$

$b =$ 9

$34 \div 5$

Multiples of 5:

5, 10, 15, 20, 25, 30, 35, 40, 45, 50

Estimation: 30 ÷ 5 = 6

35 ÷ 5 = 7

$34 \div 5 \approx$ 7

"is about"

STOP

$255 \div 4 = f$ or $f \times 4 = 255$

Multiples of 4:

20, 24, 28

Estimation: 24 ÷ 4 = 6

240 ÷ 4 = 60

28 ÷ 4 = 7

280 ÷ 4 = 70

$255 \div 4 \approx$ 60

"is about"

Estimate an answer.

1.) Bridget collected 295 signatures for the petition. If she collected about the same number of signatures each day for 7 days, about how many signatures did we get each day?

_____ ÷ _____ = _____ or _____ × _____ = _____

Multiples of 7: _____

Estimation: _____

_____

_____

_____

_____ ÷ _____ ≈ _____

about _____ signatures

2.) 56 ÷ 6

or _____ × _____ = _____

Multiples of 6: _____

Estimation: _____

_____

_____ ÷ _____ ≈ _____

3.) 370 ÷ 9

or _____ × _____ = _____

Multiples of 9: _____

Estimation: _____

_____

_____

_____

_____ ÷ _____ ≈ _____

Estimate an answer.

1.) Bridget collected 295 signatures for the petition. If she collected about the same number of signatures each day for 7 days, about how many signatures did we get each day?

295 ÷ 7 = *n* or *n* × 7 = 295

Multiples of 7: 7, 14, 21, 28, 35, 42

Estimation: 28 ÷ 7 = 4
280 ÷ 7 = 40
35 ÷ 7 = 5
350 ÷ 7 = 50

295 ÷ 7 ≈ 40

about 40 signatures

2.) 56 ÷ 6

or *n* × 6 = 56

Multiples of 6: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60

Estimation: 54 ÷ 6 = 9
60 ÷ 6 = 10

56 ÷ 6 ≈ 9

3.) 370 ÷ 9

or n × 9 = 370

Multiples of 9: 9, 18, 27, 36, 45

Estimation: 36 ÷ 9 = 4

360 ÷ 9 = 40

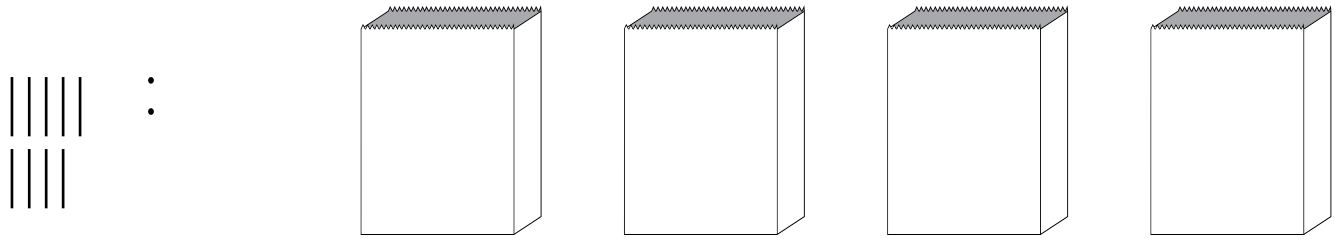
45 ÷ 9 = 5

450 ÷ 9 = 50

370 ÷ 9 ≈ 40

Use base-10 pictures to solve.

1.) Equally share 92 candies among 4 customers.



(_____ _____) ÷ _____ = _____ R _____

Total Tens, Total Ones → Dividend; Divisor; Quotient; Remainder

Estimate.

2.) 52 × 6

_____ × _____ = _____

3.) 84
× 5

_____

× ___

_____

Estimate an answer.

4.) Miguel shipped presents to his nieces and nephews who are all under the age of 10. He shipped 6 boxes of presents. Miguel spent $315 in shipping costs. If each box cost about the same to ship, how much does it cost to ship one box?

_____ ÷ _____ = _____ or _____ × _____ = _____

Multiples of 6: _____

Estimation: _____

_____

_____

_____

_____ ÷ _____ ≈ _____

about $ _____

5.) 61 ÷ 8

or _____ × _____ = _____

Multiples of 8: _____

Estimation: _____

_____

_____ ÷ _____ ≈ _____

6.) 482 ÷ 5

or _____ × _____ = _____

Multiples of 5: _____

Estimation: _____

_____

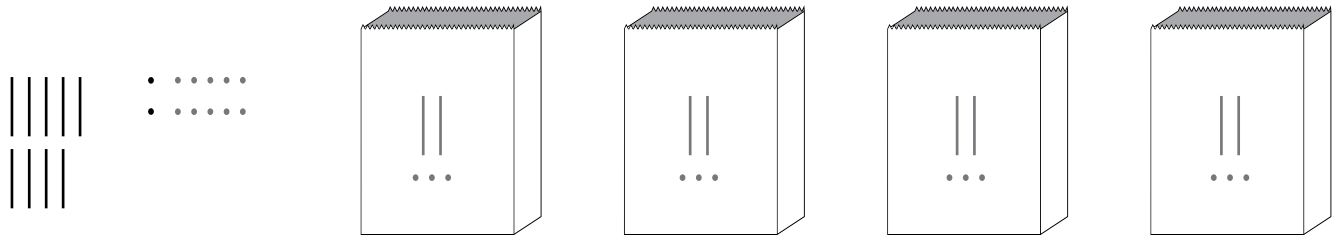
_____

_____

_____ ÷ _____ ≈ _____

Use base-10 pictures to solve.

1.) Equally share 92 candies among 4 customers.



(9 Total Tens 2 Total Ones) ÷ 4 Divisor = 23 Quotient R 0 Remainder

92 Dividend

Estimate.

2.) 52 × 6

50 × 6 = 300

3.) 84 × 5

80 × 5

400

Estimate an answer.

4.) Miguel shipped presents to his nieces and nephews who are all under the age of 10. He shipped 6 boxes of presents. Miguel spent $315 in shipping costs. If each box cost about the same to ship, how much does it cost to ship one box?

315 ÷ 6 = *n* or *n* × 6 = 315

Multiples of 6: 6, 12, 18, 24, 30, 36

Estimation: 30 ÷ 6 = 5
300 ÷ 6 = 50
36 ÷ 6 = 6
360 ÷ 6 = 60

315 ÷ 6 ≈ 50

about $ 50

5.) 61 ÷ 8

or *n* × 8 = 61

Multiples of 8: 8, 16, 24, 32, 40, 48, 56, 64

Estimation: 56 ÷ 8 = 7
64 ÷ 8 = 8

61 ÷ 8 ≈ 8

6.) 482 ÷ 5

or n × 5 = 482

Multiples of 5: 30, 35, 40, 45, 50

Estimation: 45 ÷ 5 = 9

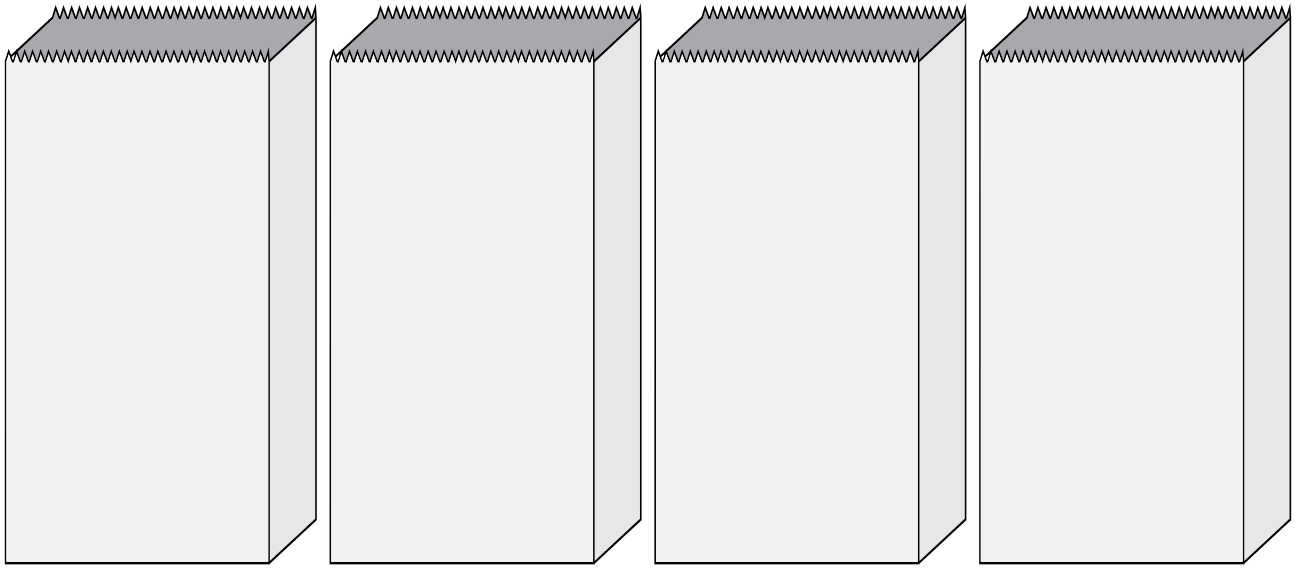
450 ÷ 5 = 90

50 ÷ 5 = 10

500 ÷ 5 = 100

482 ÷ 5 ≈ 100

Equally share 51 marbles among 4 bags.



51 ÷ 4

Estimation: _____

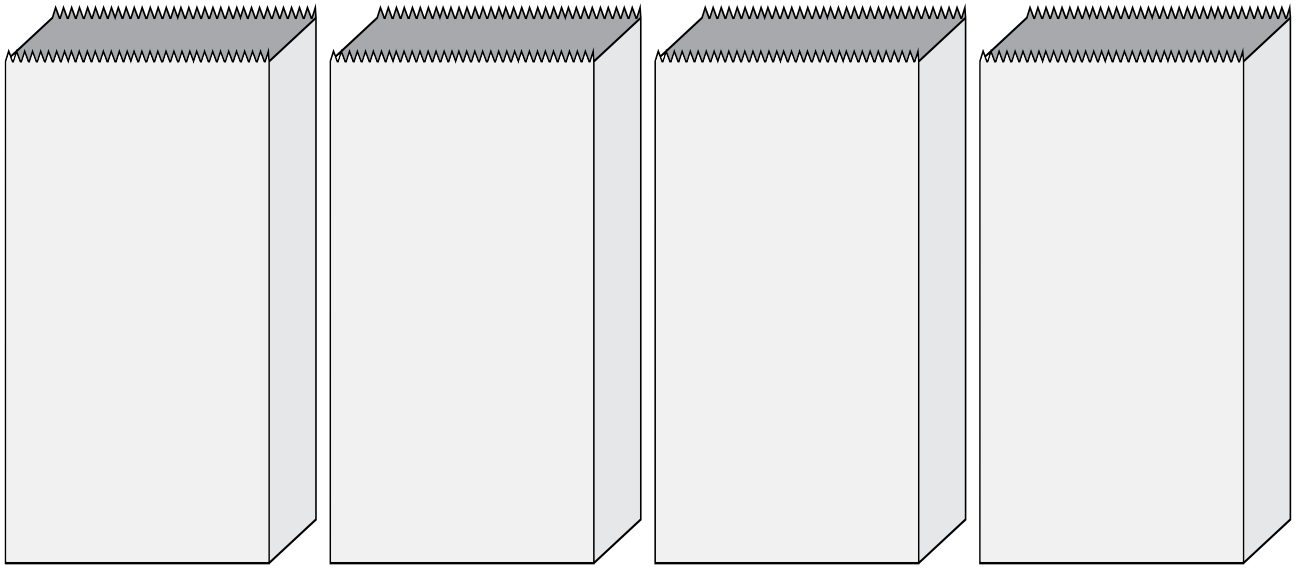
51 ÷ 4 ≈ _____
"is about"

_____	_____	÷	_____	=	_____	_____	R _____
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder

_____ Dividend

_____ Quotient

Equally share 51 marbles among 4 bags.



51 ÷ 4

Estimation: 48 and 52; 52 ÷ 4 = 13

51 ÷ 4 ≈ 13
"is about"

5	1	÷	4	=	1	2	R 3
Total Tens	Total Ones		Divisor		Tens Share	Ones Share	Remainder

51 Dividend

12 Quotient

Estimate the answer.

1.) 62 ÷ 5 or _____ × _____ = _____

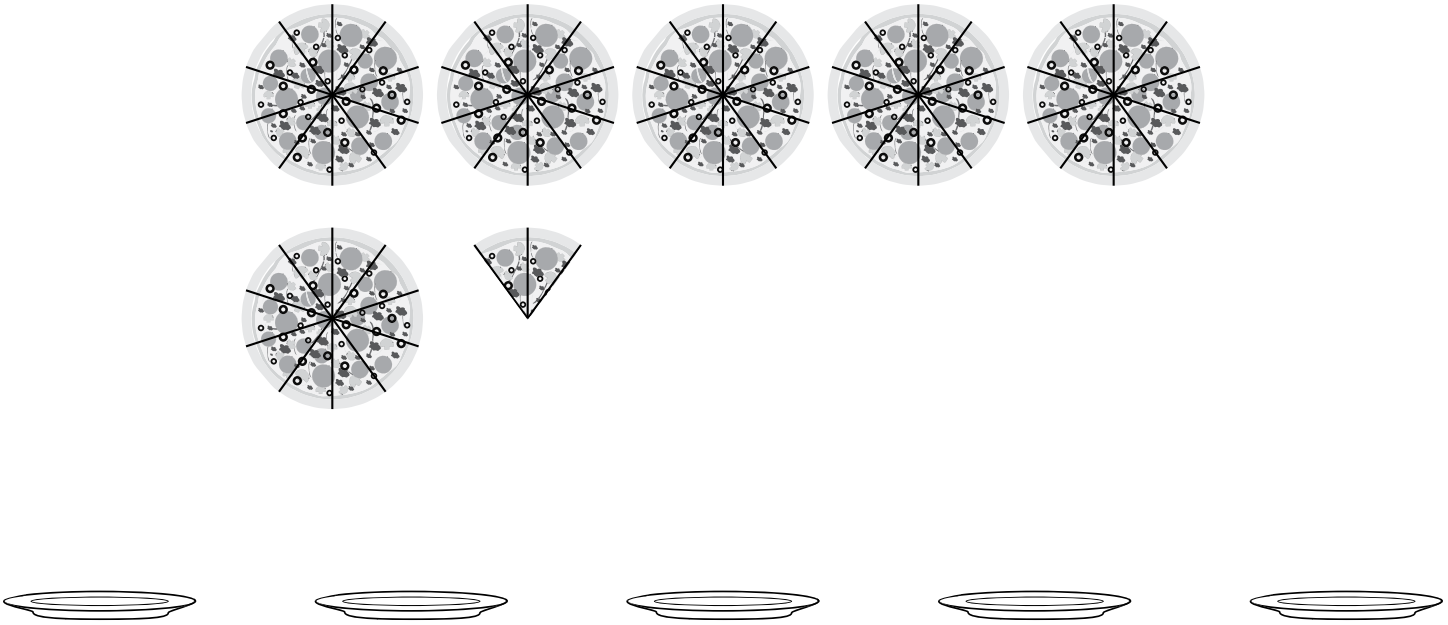
Estimation: _____

_____

62 ÷ 5 ≈ _____
is about

Use base-10 materials to solve.

2.)



3.) Write the division equation for the picture above.

_____	_____	÷	_____	=	_____	R _____
Total Tens	Total Ones		Divisor		Quotient	Remainder

4.) Christian had 72 baseball cards he wanted to share between himself and his 4 friends. About how many baseball cards does Christian and each of his friends get?

What is the problem asking you to find?

_____ ÷ _____ = _____ or _____ ÷ _____ = _____

Estimation: _____

If Christian were to share the cards equally, exactly how many cards would each person get?

How many are left over?

Estimate the answer.

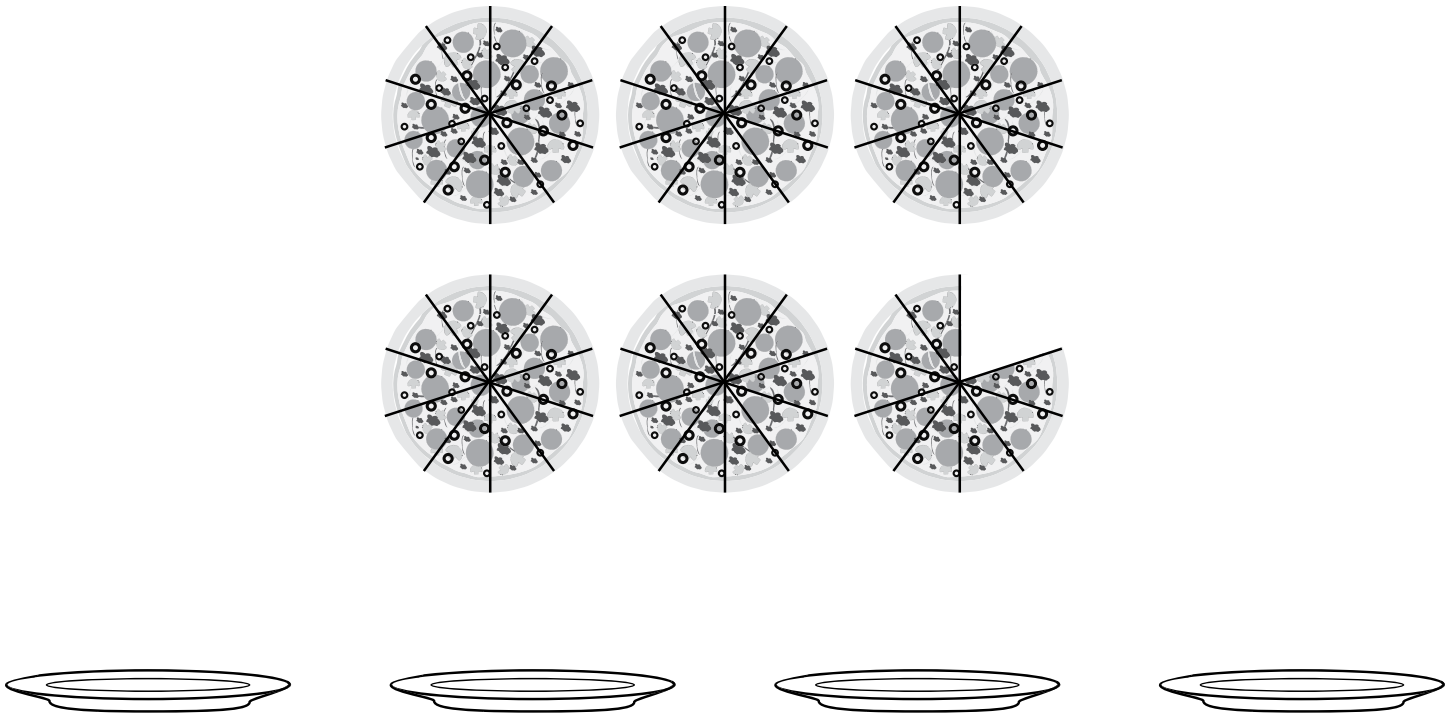
5.) 18 ÷ 4 or _____ × _____ = _____

Estimation: _____

_____

18 ÷ 4 ≈ _____
is about

6.) Use the picture to share the 58 slices of pizza among 4 people.



7.) Write the division sentence for the picture above.

_____	_____	÷	_____	=	_____	R _____
Total Tens	Total Ones		Divisor		Quotient	Remainder

Estimate the answer. Then solve using equal sharing.

1.) 62 ÷ 5 or n × 5 = 62

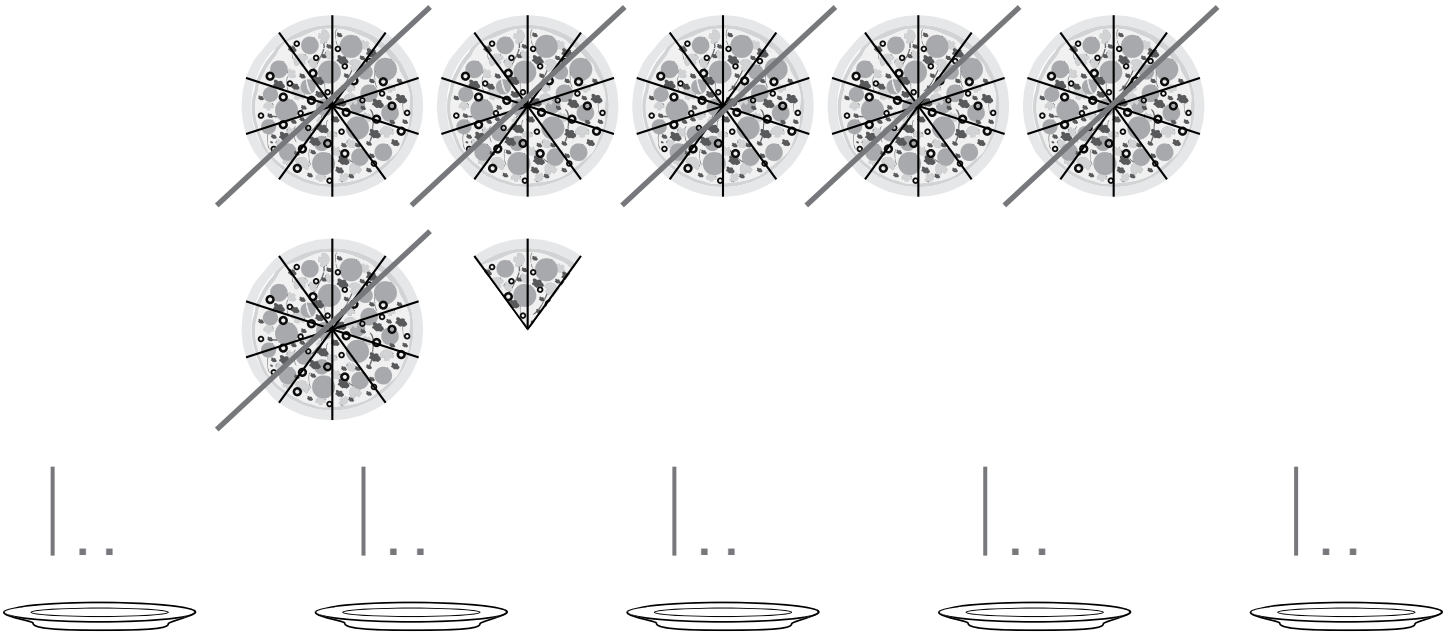
Estimation: 60 ÷ 5 = 12

65 ÷ 5 = 13

62 ÷ 5 ≈ 12
is about

Use base-10 materials to solve. 62 ÷ 5

2.)



3.) Write the division equation for the picture above.

6	2	÷	5	=	12	R 2
Total Tens	Total Ones		Divisor		Quotient	Remainder

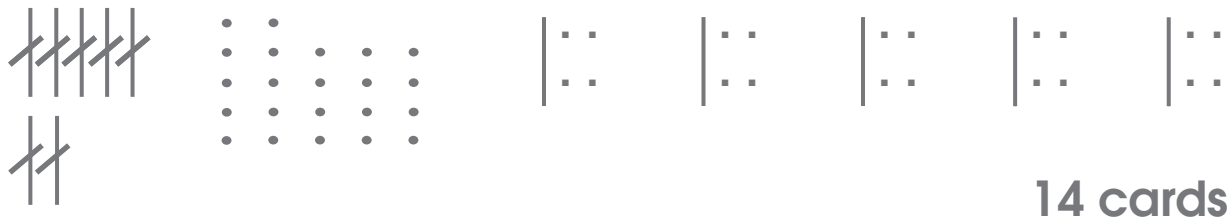
4.) Christian had 72 baseball cards he wanted to share between himself and his 4 friends. About how many baseball cards does Christian and each of his friends get?

What is the problem asking you to find?

72 ÷ 5 = *n* or *n* ÷ 5 = 72

Estimation: 70 ÷ 5 = 14 75 ÷ 5 = 15

If Christian were to share the cards equally, exactly how many cards would each person get?



14 cards

7	2	÷	5	=	14	R 2
Total Tens	Total Ones		Divisor		Quotient	Remainder

How many are left over?

2 leftover

Estimate the answer.

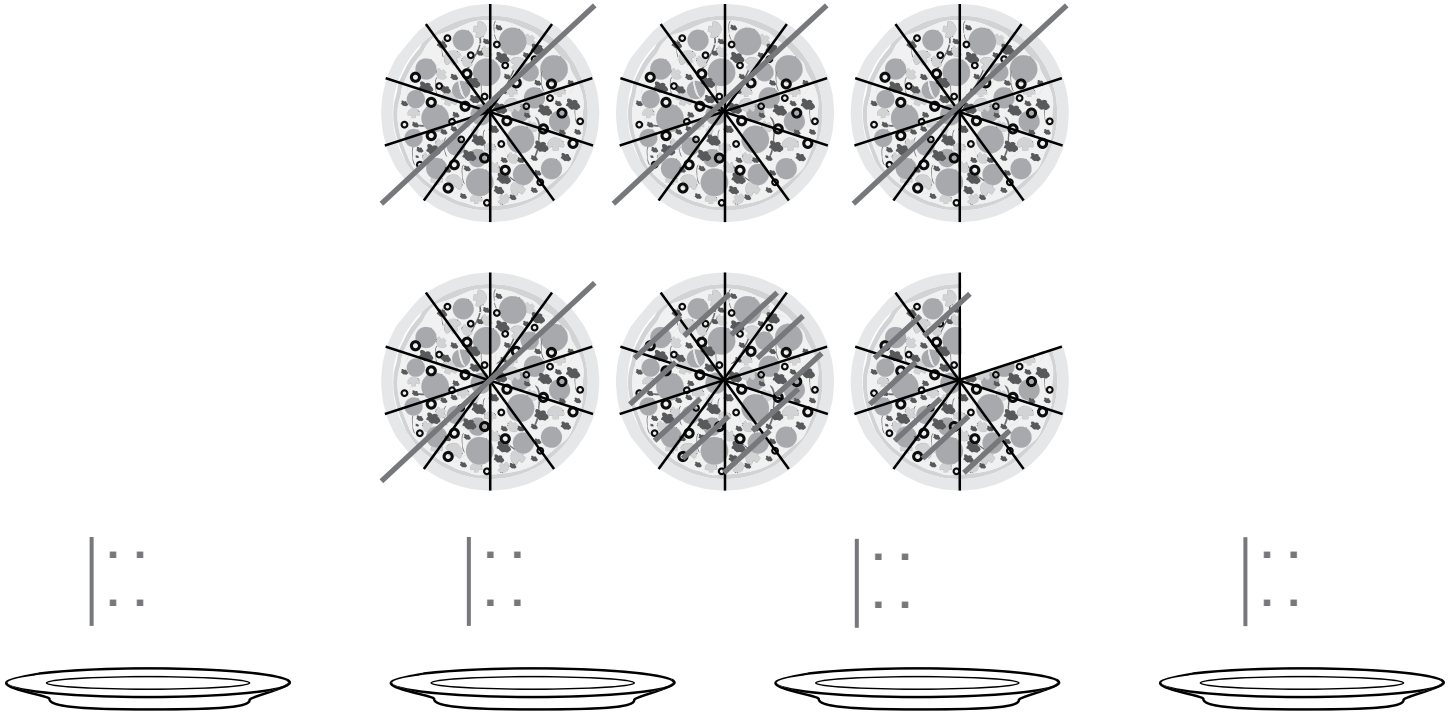
5.) 18 ÷ 4 or ___n___ × ___4___ = ___18___

Estimation: ___16 ÷ 4 = 4___

___20 ÷ 4 = 5___

18 ÷ 4 ≈ ___4 OR 5___
is about

6.) Use the picture to share the 58 slices of pizza among 4 people.



7.) Write the division sentence for the picture above.

5	8	÷	4	=	14	R 2
Total Tens	Total Ones		Divisor		Quotient	Remainder

Use the base-10 picture to solve.

1.) Equally share 52 acorns among 4 squirrels.

Division equation: _____ ÷ _____ = _____ R _____

Total | Squirrels | Equal Share | Left Over

2.) Estimate the answer.

58 ÷ 7 or _____ × _____ = _____

Estimation: _____

_____

58 ÷ 7 ≈ _____
is about

3.)

423 ÷ 8 ≈ 5

400 ÷ 8 = 5

Is this estimation true or false? _____

Why? _____

Draw base-10 pictures to solve. Choose the correct answer.

4.) Rachel ordered 38 beads for 3 necklaces. After the 3 necklaces are made with equal beads on each, how many beads will be left over?

A 1 left over

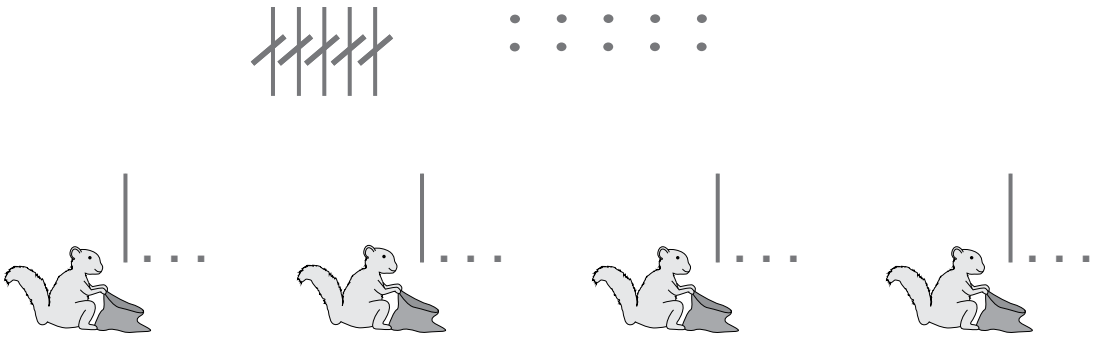
C 2 left over

B 5 left over

D 3 left over

Use the base-10 picture to solve.

1.) Equally share 52 acorns among 4 squirrels.



Division equation: 52 ÷ 4 = 13 R 0

Total	Squirrels	Equal Share	Left over

2.) Estimate the answer.

58 ÷ 7 or n × 7 = 58

Estimation: 56 ÷ 7 = 8

63 ÷ 7 = 9

58 ÷ 7 ≈ 8
is about

3.)

423 ÷ 8 ≈ 5

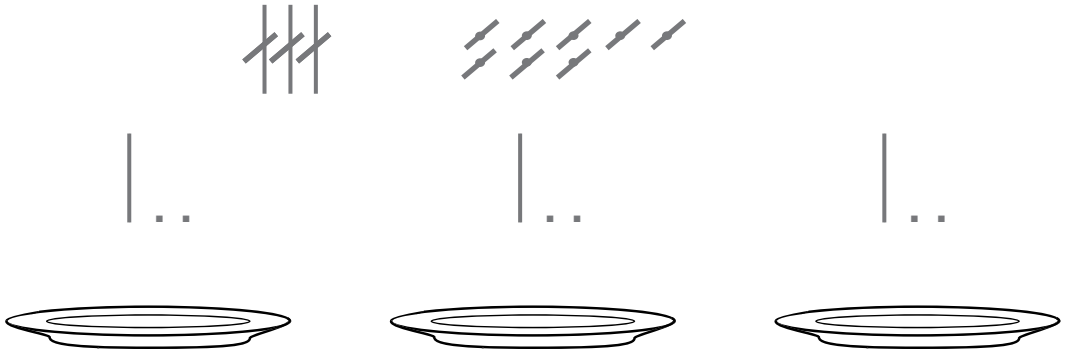
400 ÷ 8 = 5

Is this estimation true or false? false

Why? 400 ÷ 8 = 50 423 ÷ 8 ≈ 50

Draw base-10 picture to solve. Choose the correct answer.

4.) Rachel ordered 38 beads for 3 necklaces. After the 3 necklaces are made with equal beads on each, how many beads will be left over?



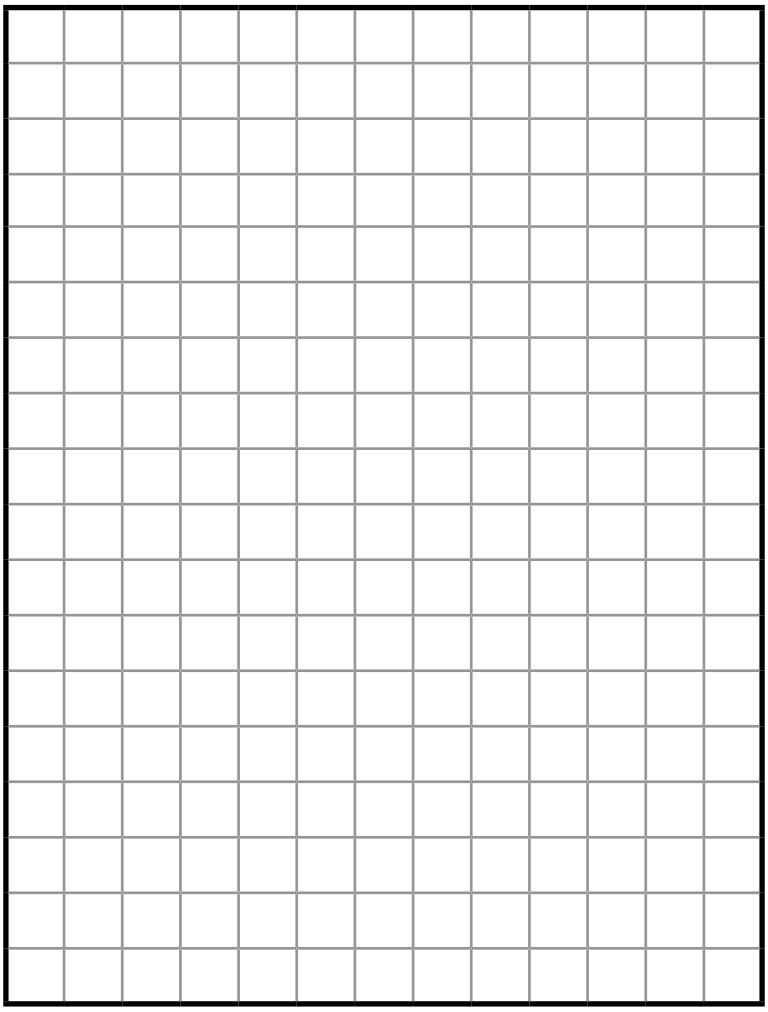
A 1 left over

C 2 left over

B 5 left over

D 3 left over

_____ × _____



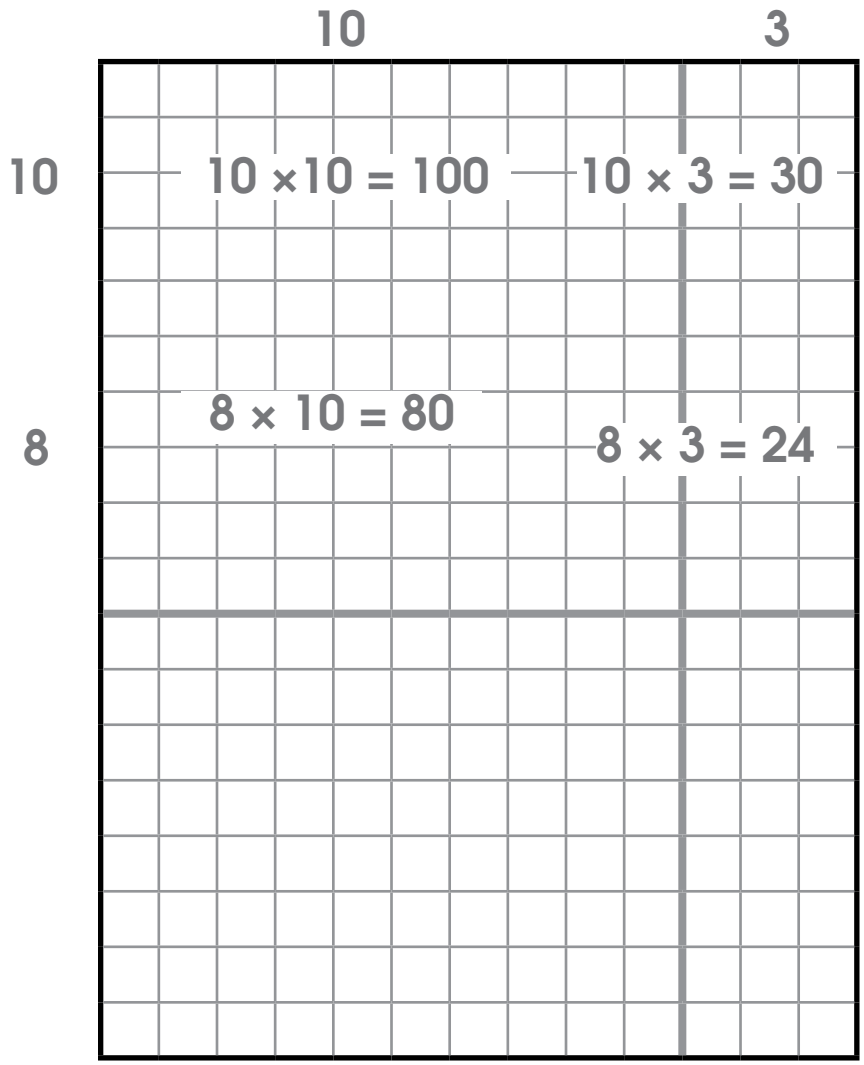
Estimate: 18 × 13

↓ ↓

_____ × _____ = _____

$$\begin{array}{r} 18 \\ \times\ 13 \\ \hline \end{array}$$

18 × 13



100 + 30 = 13

80 + 24 = 104

130 + 104 = 234

Estimate: 18 × 13

↓ ↓

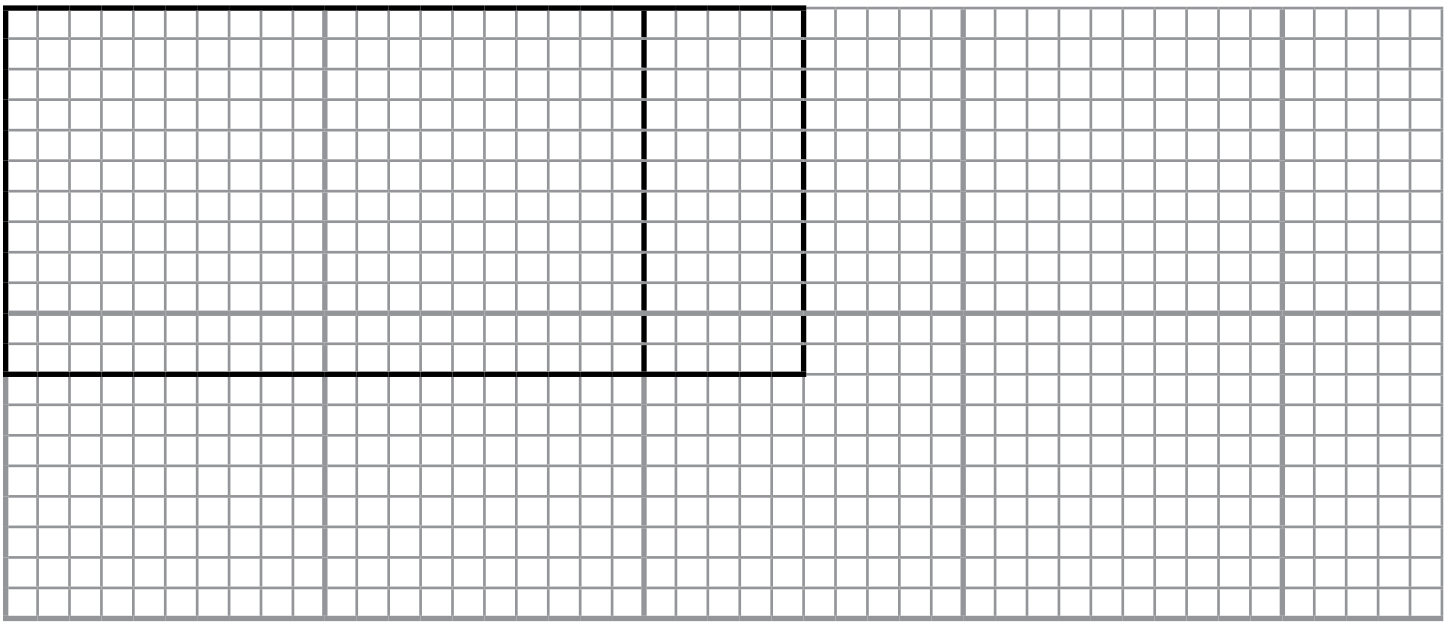
20 × 10 = 200

$$\begin{array}{r} 18 \\ \times\ 13 \\ \hline 54 \\ +\ 180 \\ \hline 234 \end{array}$$

Solve using the partial-products method.

1.) Elijah had a birthday party at Go Cart Racing Track. He had 12 friends attend his party. It cost each friend $14 to race a go-cart around the track 5 times. The birthday boy was free. How much money was it for all 12 friends to race the track?

2.) Estimate the area, break apart the area model, label the dimensions, and then solve using partial products.



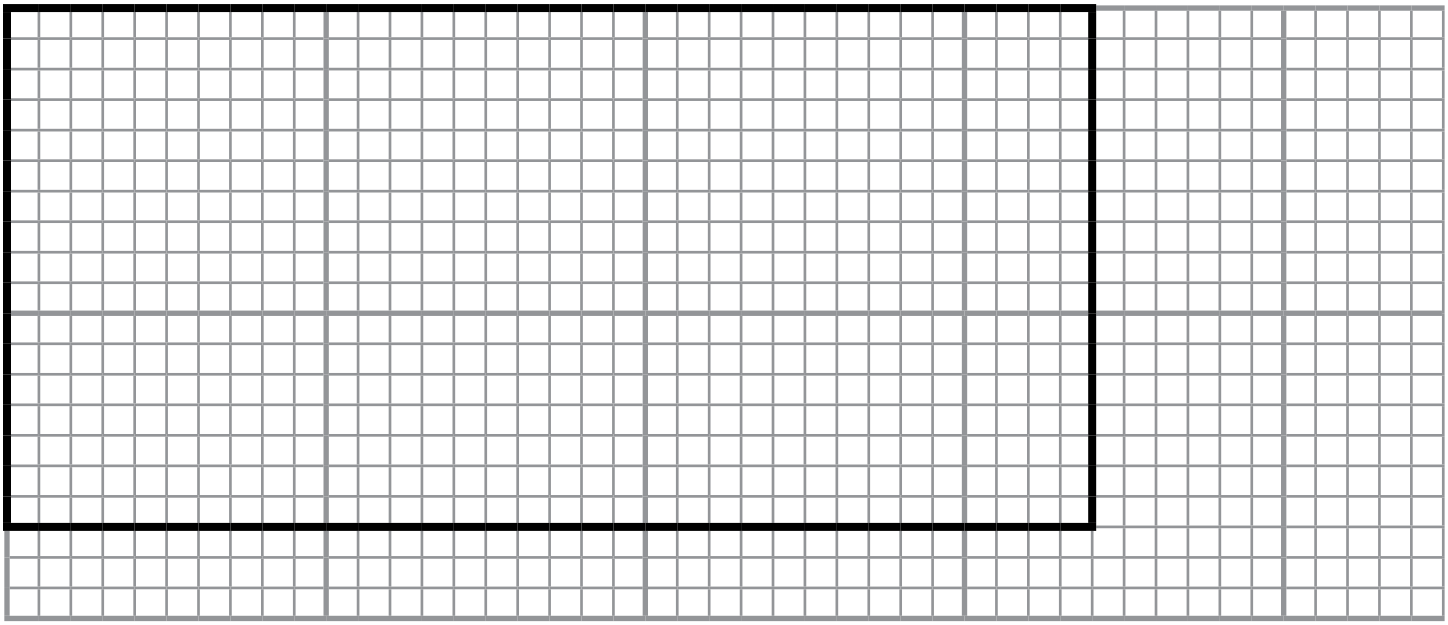
Estimate:

12 × 25

↓ ↓

_____ × _____ = _____

3.) Estimate the area, break apart the area model, label the dimensions, and then solve using partial products.



Estimate:

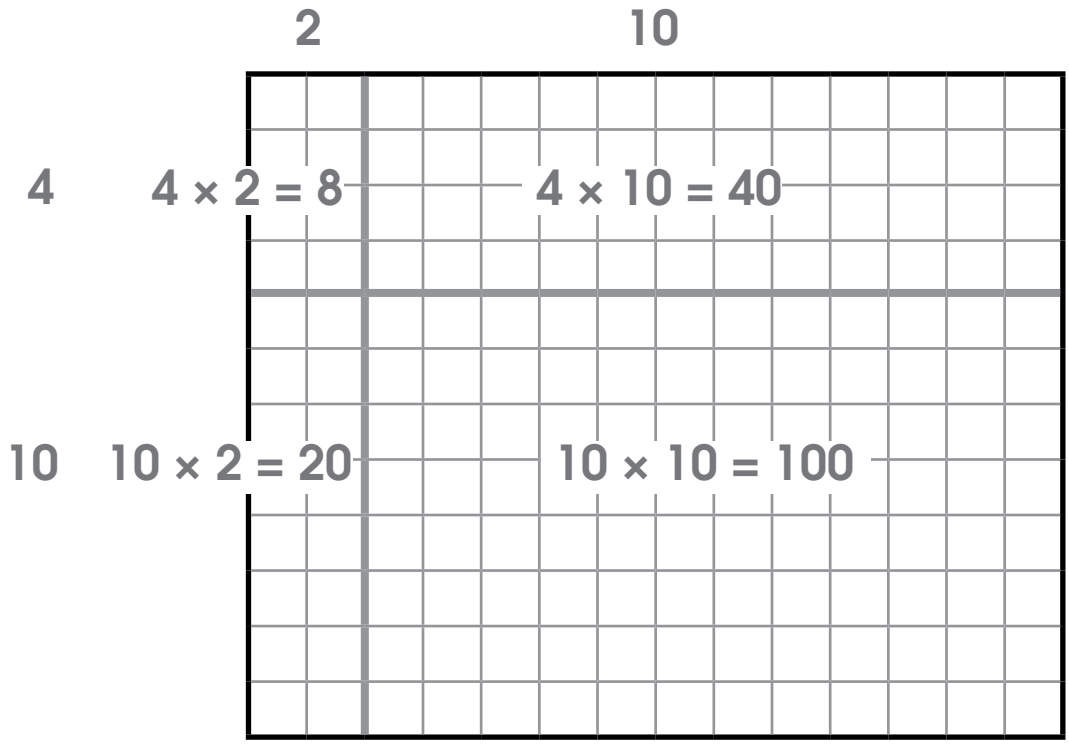
17 × 34

↓ ↓

_____ × _____ = _____

Solve using the partial products method.

1.) Elijah had a birthday party at Go Cart Racing Track. He had 12 friends attend his party. It cost each friend $14 to race a go-cart around the track ~~5 times~~. The birthday boy was free. How much money was it for all 12 friends to race the track?



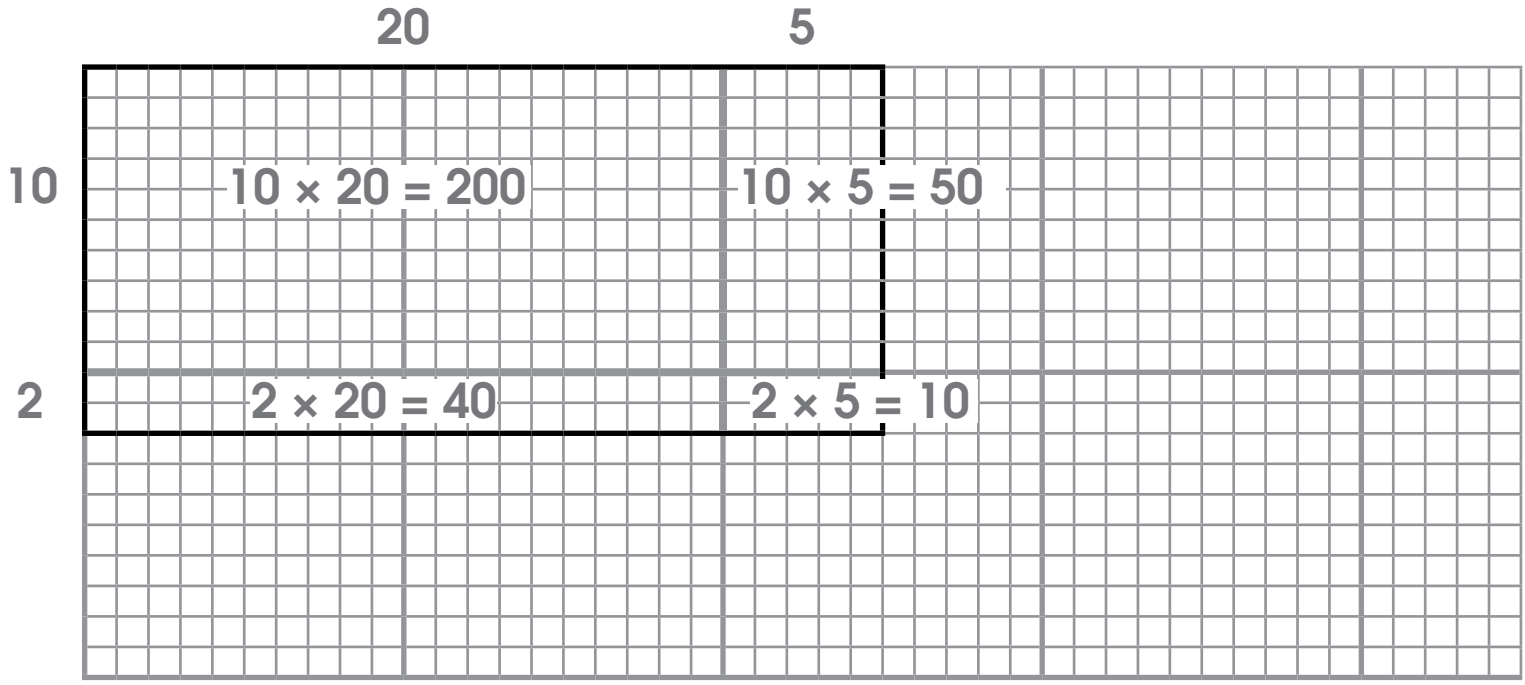
8 + 40 = 48

20 + 100 = 120

48 + 120 = 168

$168

2.) Estimate the area, break apart the area model, label the dimensions, and then solve using partial products.



Estimate:

12 × 25

↓ ↓

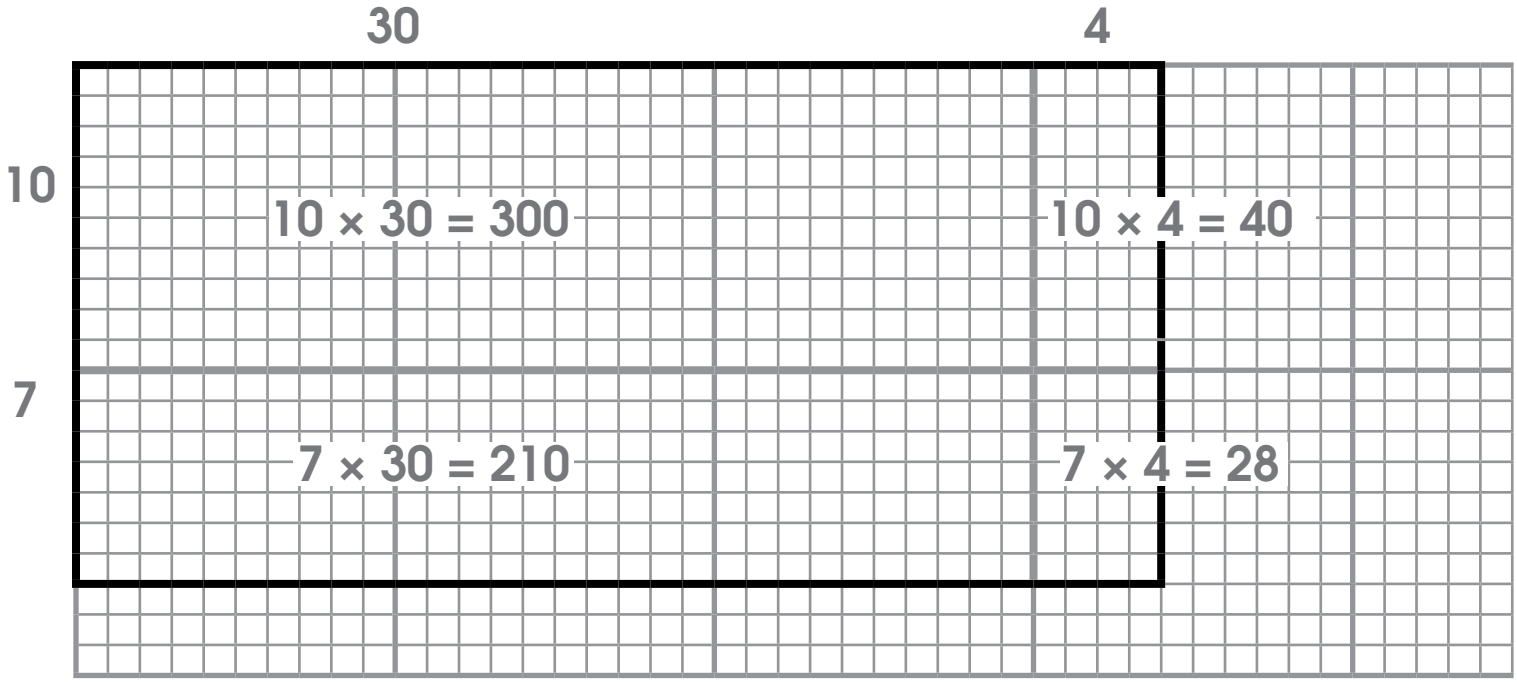
10 × 30 = 300

200 + 50 = 250

40 + 10 = 50

250 + 50 = 300

3.) Estimate the area, break apart the area model, label the dimensions, and then solve using partial products.



Estimate:

17 × 34

↓ ↓

20 × 30 = 600

300 + 40 = 340

210 + 28 = 238

340 + 238 = 578

Estimate.

1.) 38 ÷ 3 or _____ x _____ = _____

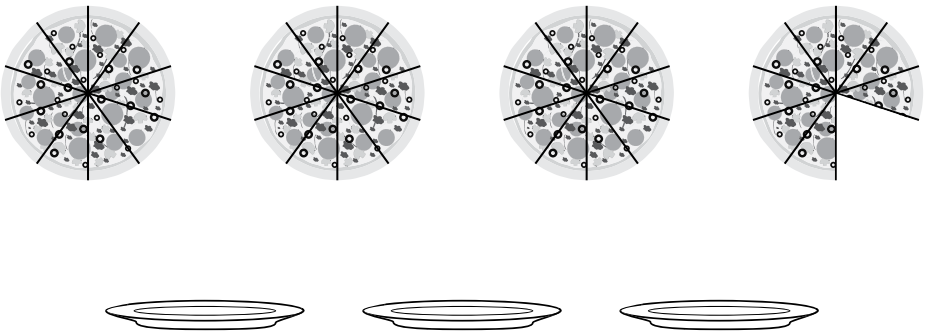
Multiples of 3: _____

Estimation: _____

_____

38 ÷ 3 ≈ _____

Use the picture to solve 38 ÷ 3.



2.) _____ Total Tens | _____ Total Ones | _____ Divisor (# of Sharers) | _____ Quotient (Equal Share) | R _____ Remainder (# Left Over)

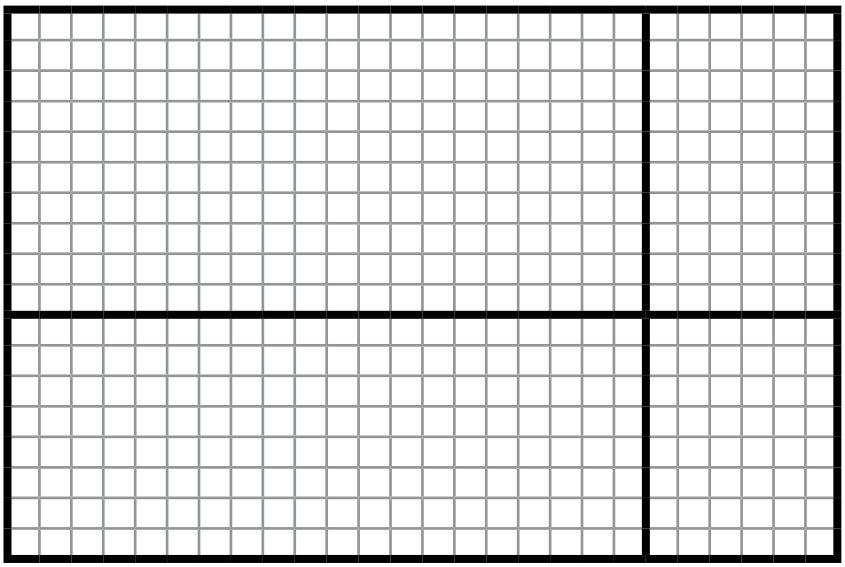
3.) Estimate:

18 × 26

↓ ↓

____ × ____ = ____

4.) Label the dimensions and then solve using partial products.



5.) Estimate:

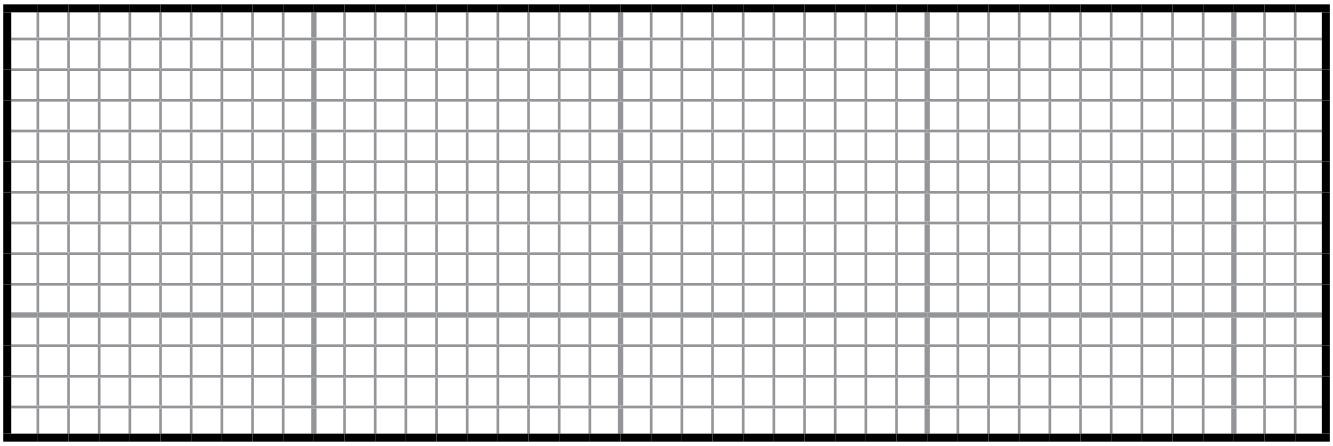
14 × 43

↓ ↓

____ × ____ = ____

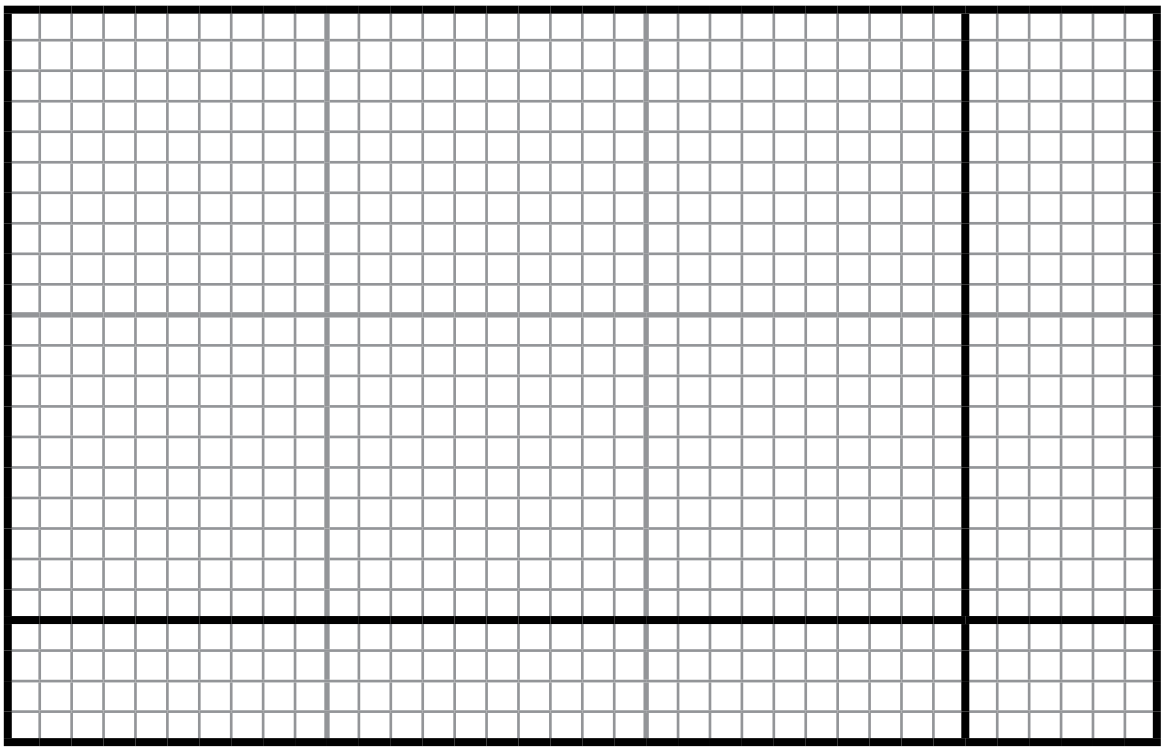
6.) Break apart by using partial products and label the dimensions.

14 × 43



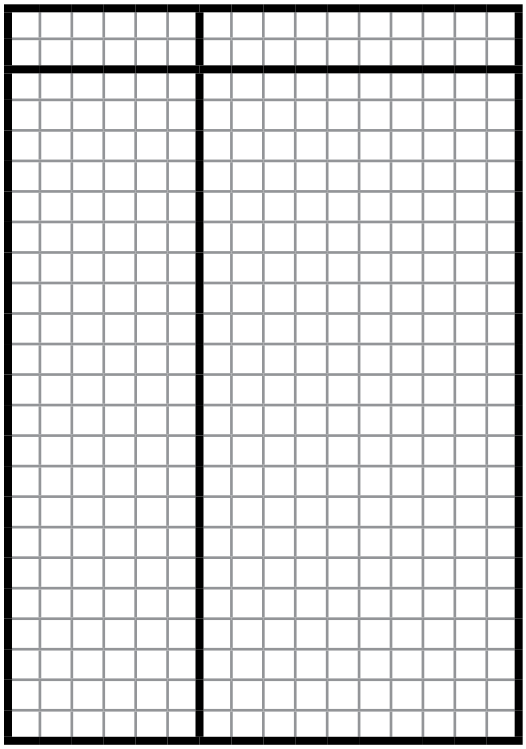
Estimate the area, label the dimensions, and use the partial products to solve.

7.) A community group is painting a rectangular mural that will be divided into 4 smaller rectangles. The dimensions of the mural are 24 feet by 36 feet. They divided the mural as shown below. What is the area of the entire mural?

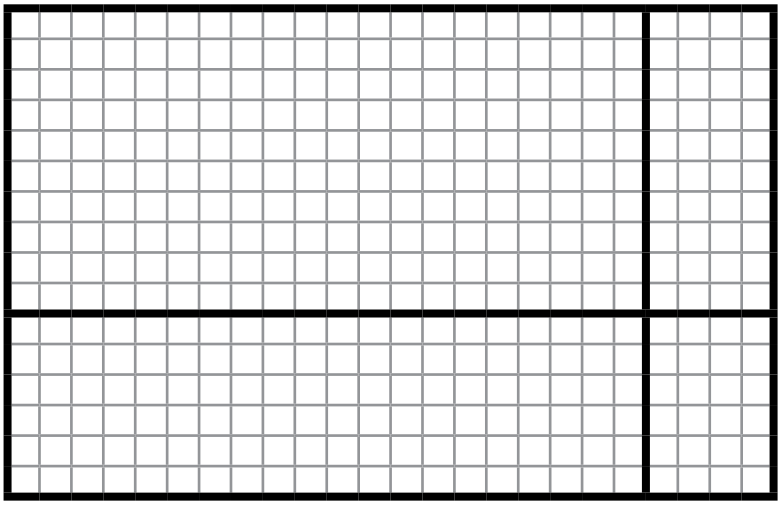


8.) Dan is plotting the land for his farm. He knows that the dimensions of his land are 16 acres by 24 acres, but he wants to figure out the area. Choose the area model that correctly represents the partial products to solve.

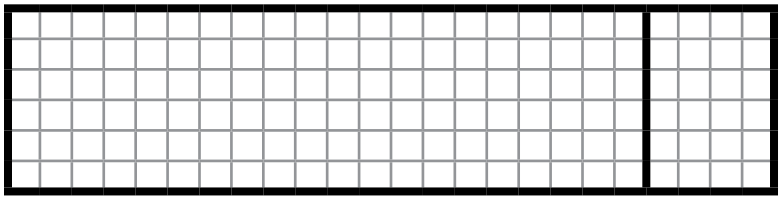
A



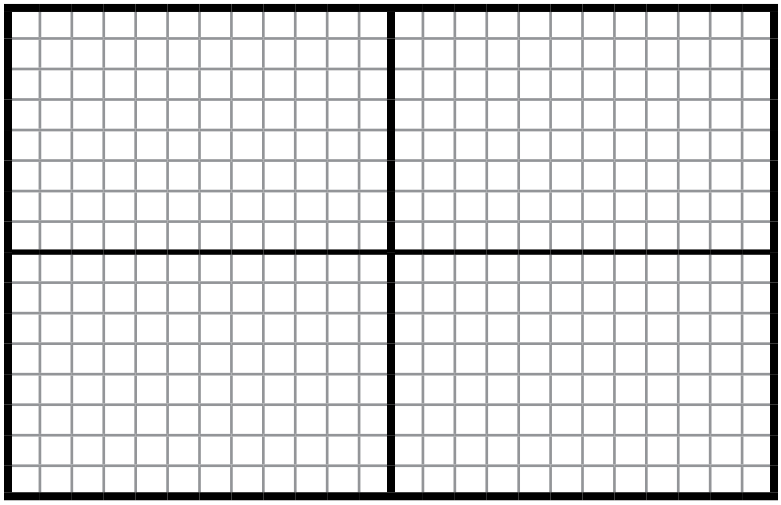
B



C



D



Estimate.

1.) 38 ÷ 3 or *n* x 3 = 38

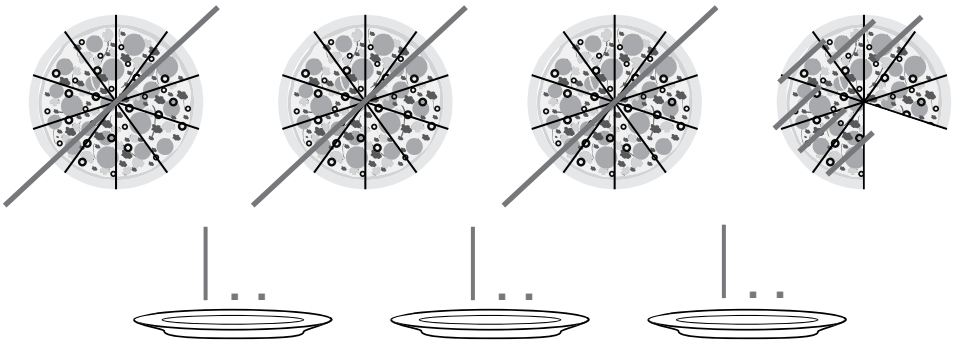
Multiples of 3: 30, 33, 36, 39

Estimation: 36 ÷ 3 = 12

39 ÷ 3 = 13

38 ÷ 3 ≈ 13

Use the picture to solve 38 ÷ 3.



2.) 3 Total Tens, 8 Total Ones — Dividend; 3 Divisor; 12 Quotient; R 2 Remainder

3.) Estimate:

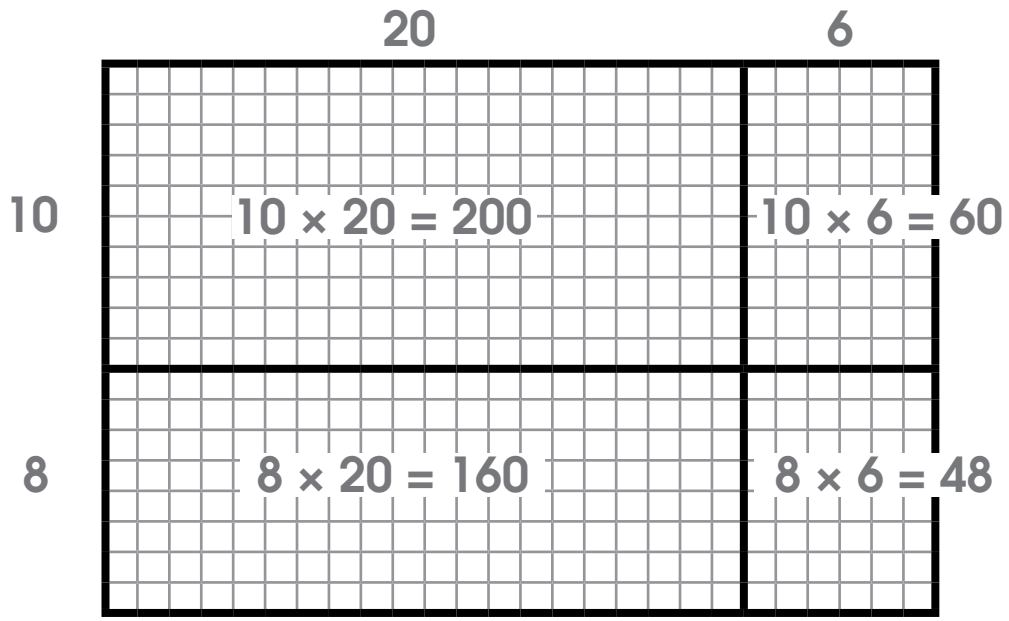
18 × 26

↓ ↓

20 × 30 = 600

answers may vary

4.) Label the dimensions and then solve using partial products.



200 + 60 = 260

160 + 48 = 208

260 + 208 = 468

5.) Estimate:

14 × 43

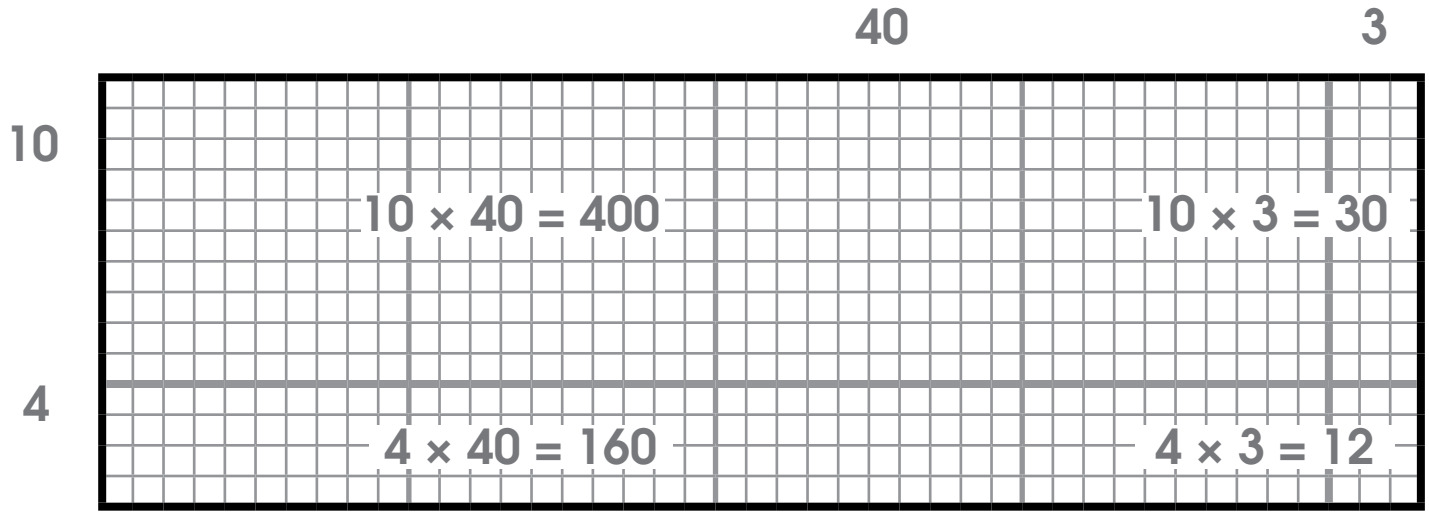
↓ ↓

10 × 45 = 450

answers may vary

6.) Break apart by using partial products and label the dimensions.

14 × 43



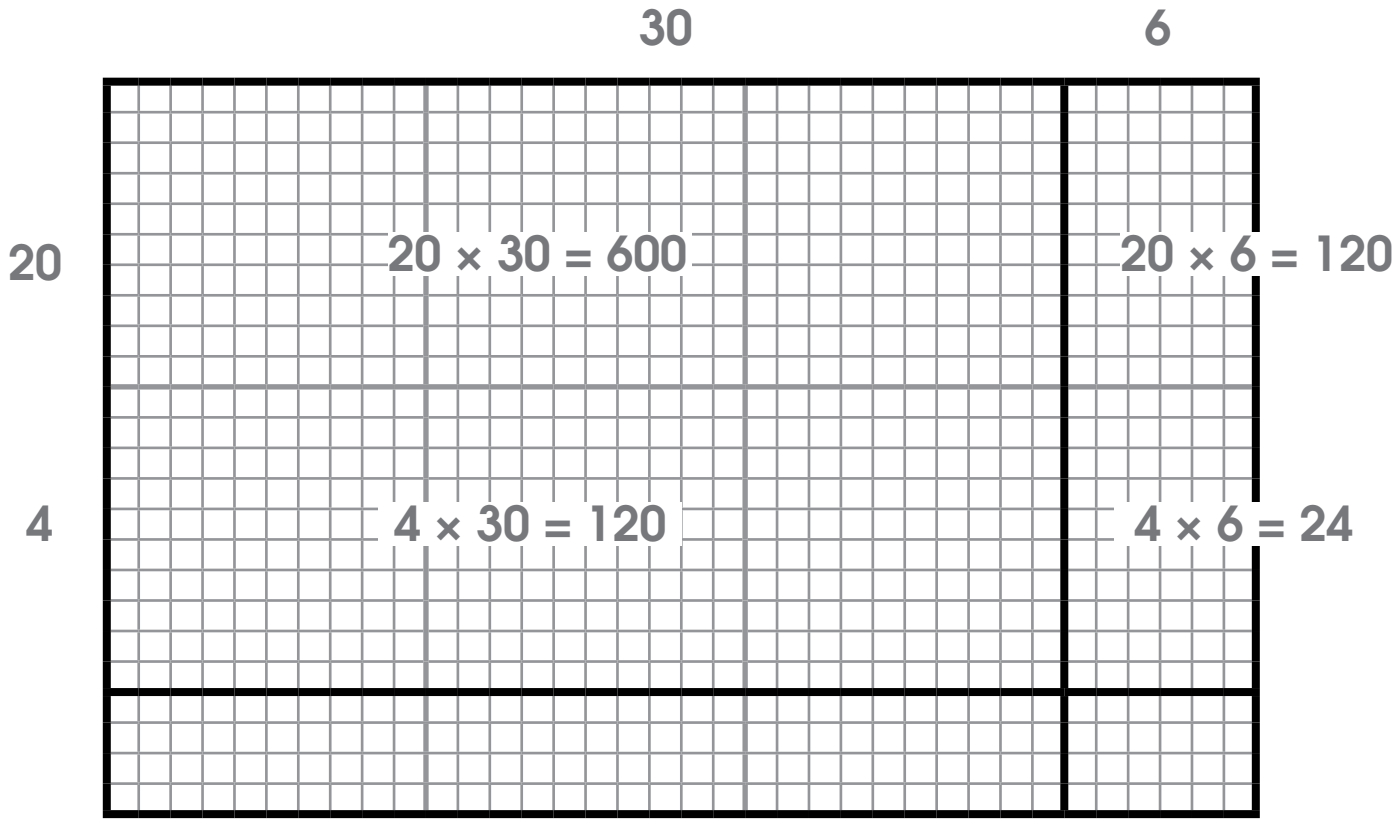
400 + 30 = 430

160 + 12 = 172

430 + 172 = 602

Estimate the area, label the dimensions, and use the partial products to solve.

7.) A community group is painting a rectangular mural that will be divided into 4 smaller rectangles. The dimensions of the mural are 24 feet by 36 feet. They divided the mural as shown below. What is the area of the entire mural?



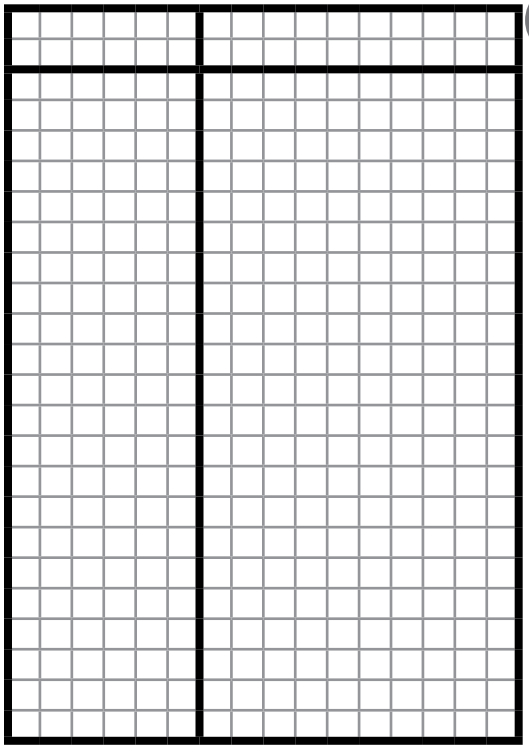
600 + 120 = 720

120 + 24 = 144

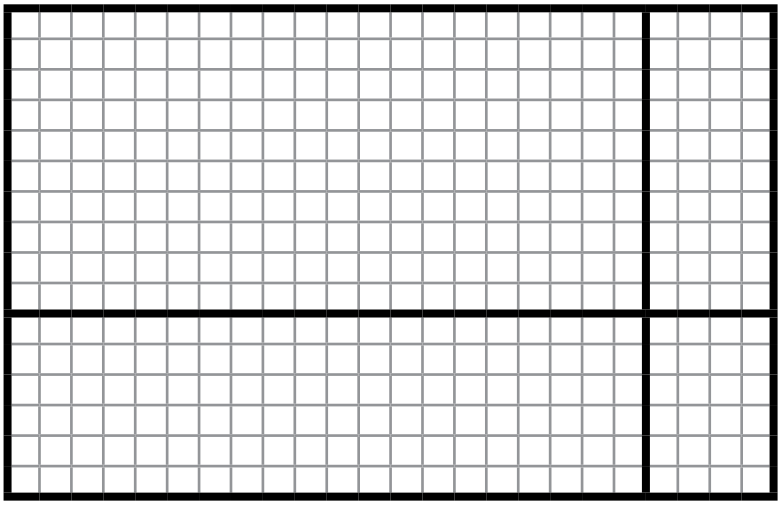
720 + 144 = 864 feet

8.) Dan is plotting the land for his farm. He knows that the dimensions of his land are 16 acres by 24 acres, but he wants to figure out the area. Choose the area model that correctly represents the partial products to solve.

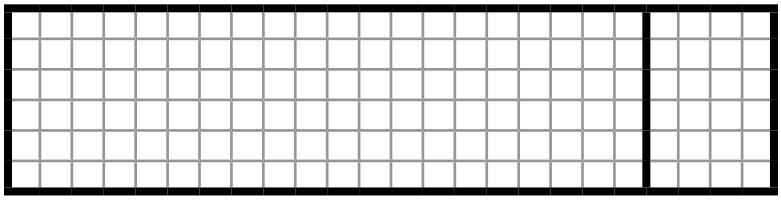
A



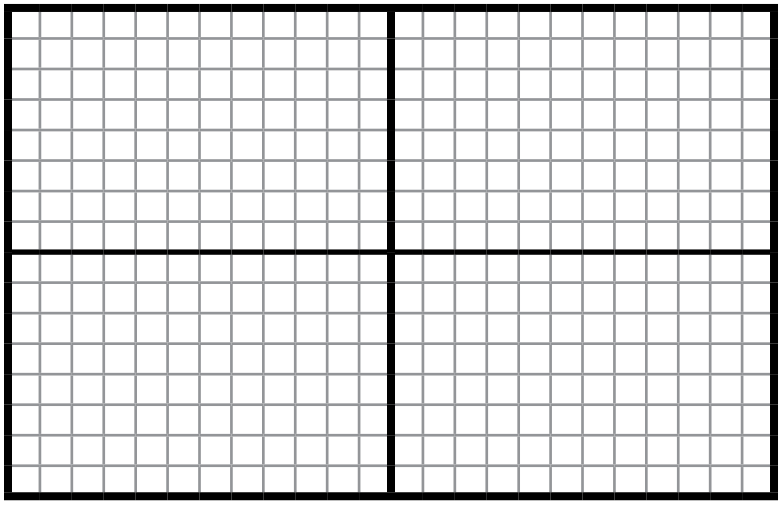
B



C



D

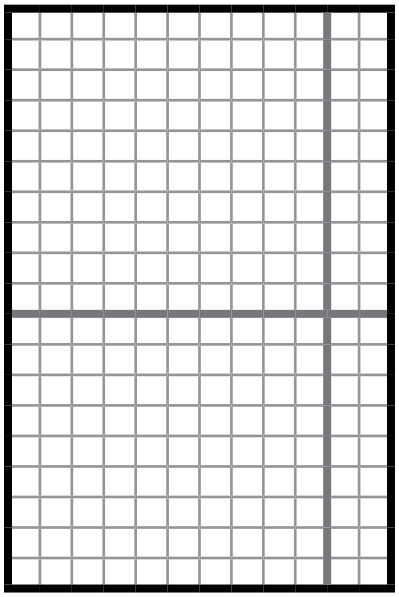


19 × 12

Estimate: 19 × 12

↓ ↓

_____ × _____ = _____

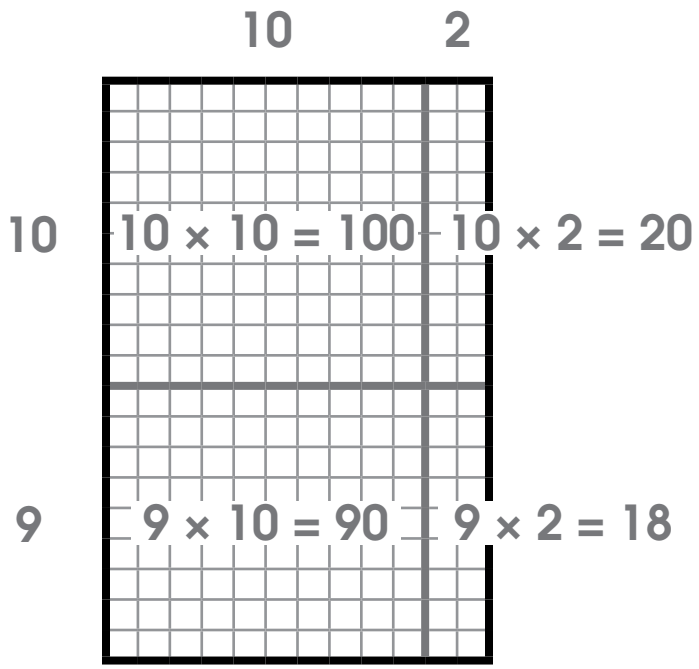


19 × 12

Estimate: 19 × 12

↓ ↓

20 × 10 = 200



100 + 20 = 120

90 + 18 = 108

120 + 108 = 228

____ × ____

Estimate: 32 × 57

____ × ____ = ____

Marcus volunteers at his local food bank. If the food bank collects 75 pounds of food every day, how much food will the food bank collect in October, which has 31 days?

Estimate: _____ × _____ = _____

32 × 57

	50	7	
30	30 × 50 = 1,500	30 × 7 = 210	32
2	2 × 50 = 100	2 × 7 = 14	
	57		

Estimate: 32 × 57

↓ ↓

30 × 60 = 1,800

1,500 + 210 = 1,710

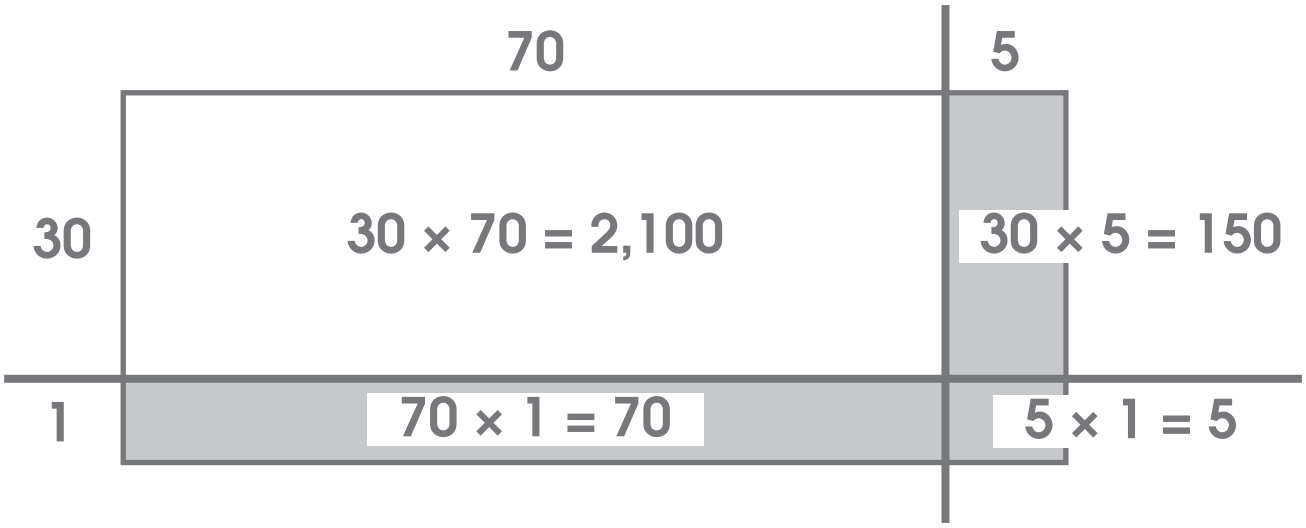
100 + 14 = 114

1,710 + 114 = 1,824

STOP

Marcus volunteers at his local food bank. If the food bank collects 75 pounds of food every day, how much food will the food bank collect in October, which has 31 days?

Estimate: 30 × 80 = 2,400



2,100 + 150 = 2,250

70 + 5 = 75

2,250 + 75 = 2,325

2,325 lbs

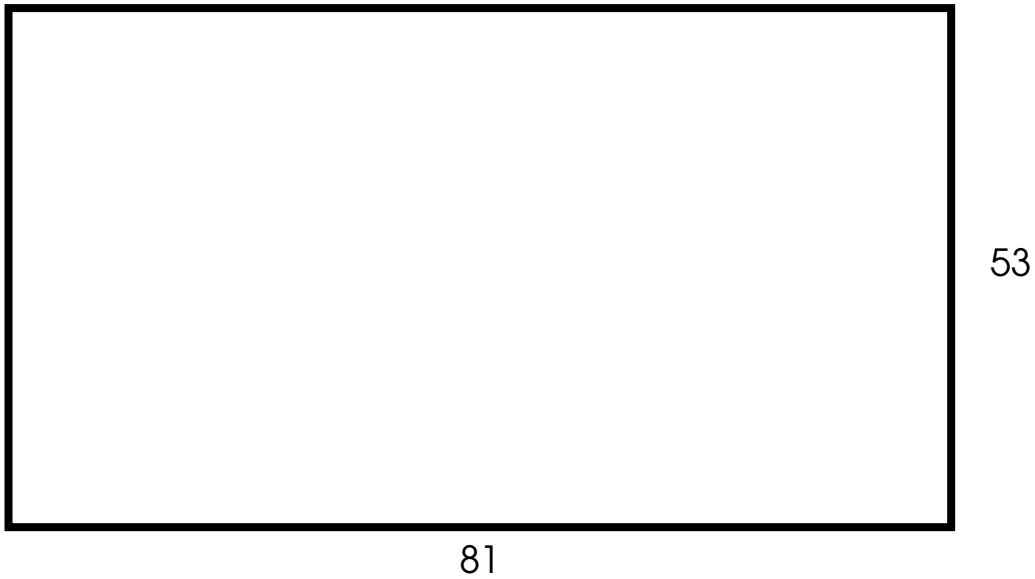
1.) Solve using partial products.

Estimate:

53 × 81

↓ ↓

____ × ____ = _____



2.) Solve using partial products.

Estimate:

28 × 73

↓ ↓

____ × ____ = _____

Use the partial-products method to solve. Draw an area model to represent the problem.

3.) In Leslie's school, there are 28 desks in each classroom. There are 42 classrooms in the building. 632 students attend Leslie's school. How many desks are there altogether?

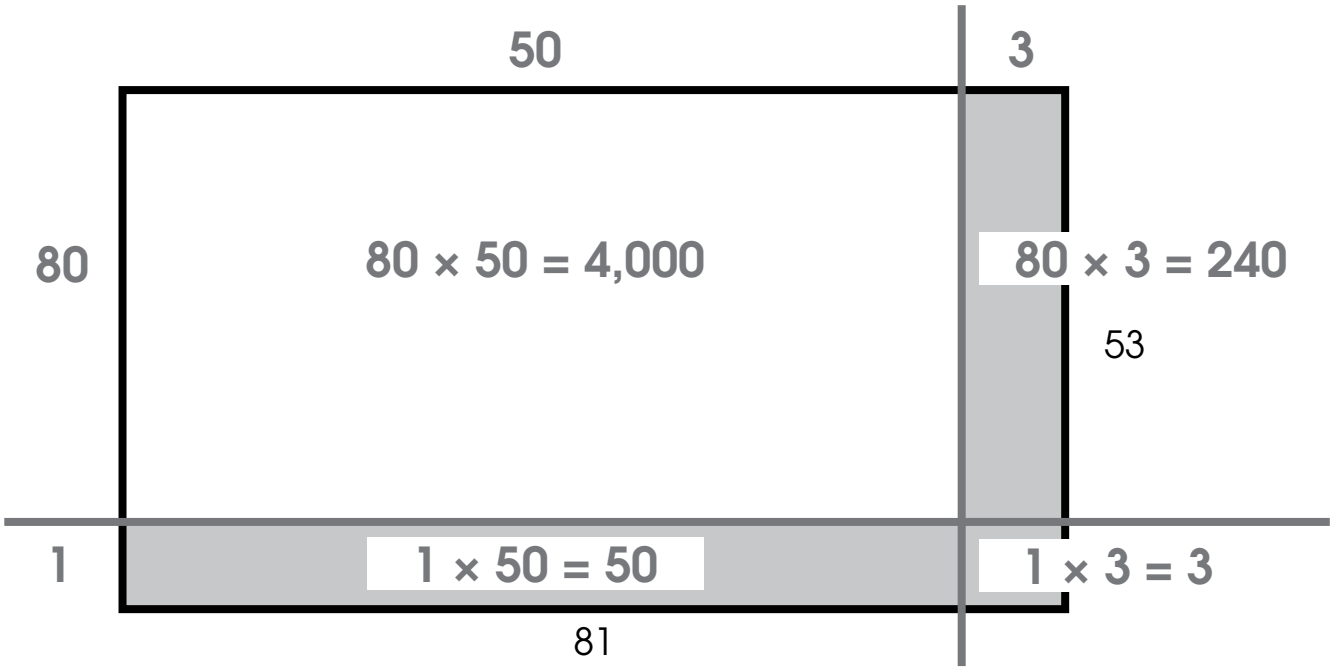
1.) Solve using partial products.

Estimate:

53 × 81

↓ ↓

40 × 70 = 2,800



4,000 + 240 = 4,240

50 + 3 = 53

4,240 + 53 = 4,293

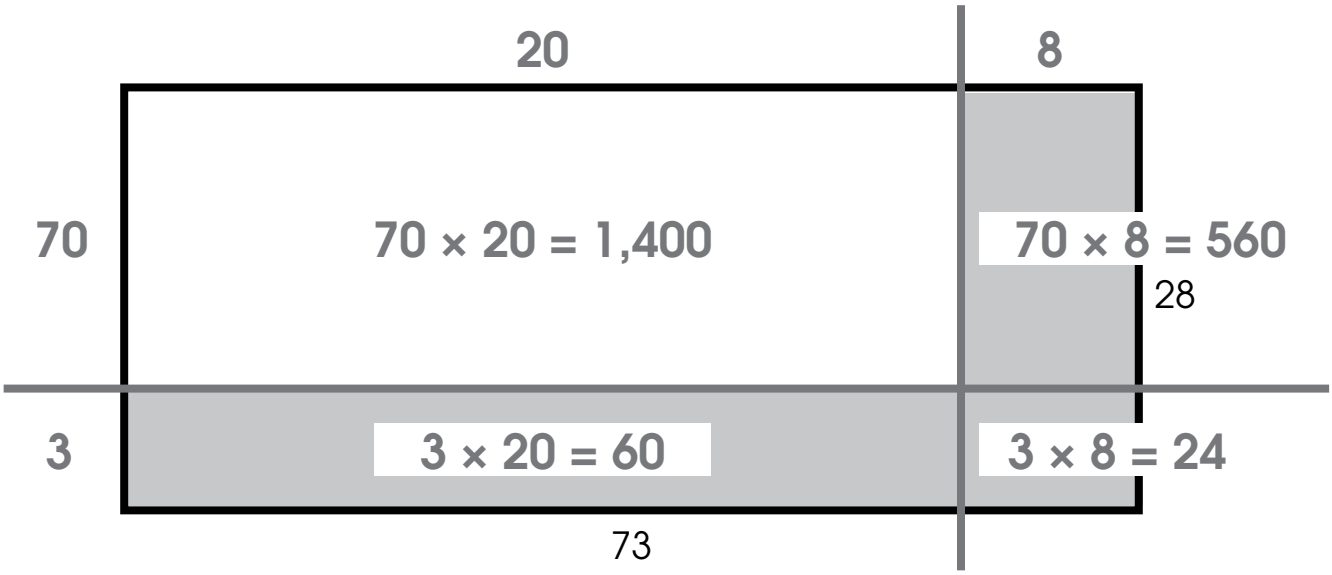
2.) Solve using partial products.

Estimate:

28 × 73

↓ ↓

30 × 70 = 2,100



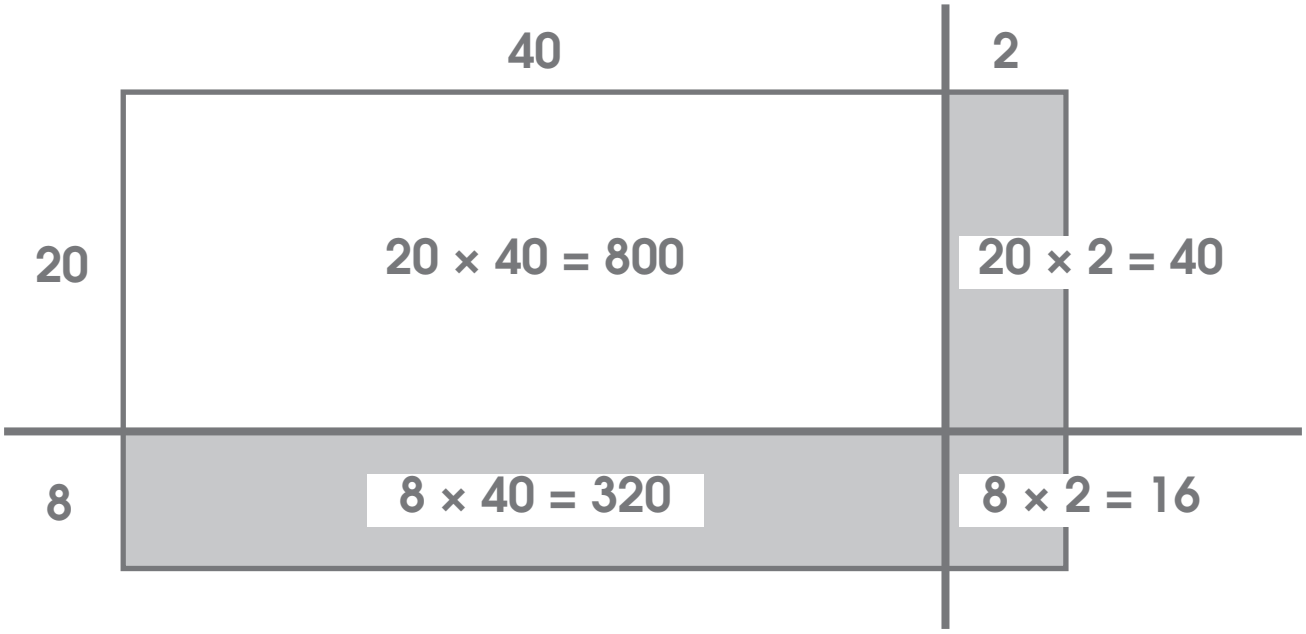
1,400 + 560 = 1,960

60 + 24 = 84

1,960 + 84 = 2,044

Use the partial-products method to solve. Draw an area model to represent the problem.

3.) In Leslie's school, there are 28 desks in each classroom. There are 42 classrooms in the building. 632 students attend Leslie's school. How many desks are there altogether?



800 + 40 = 840

320 + 16 = 336

840 + 336 = 1,176

1,176 desks

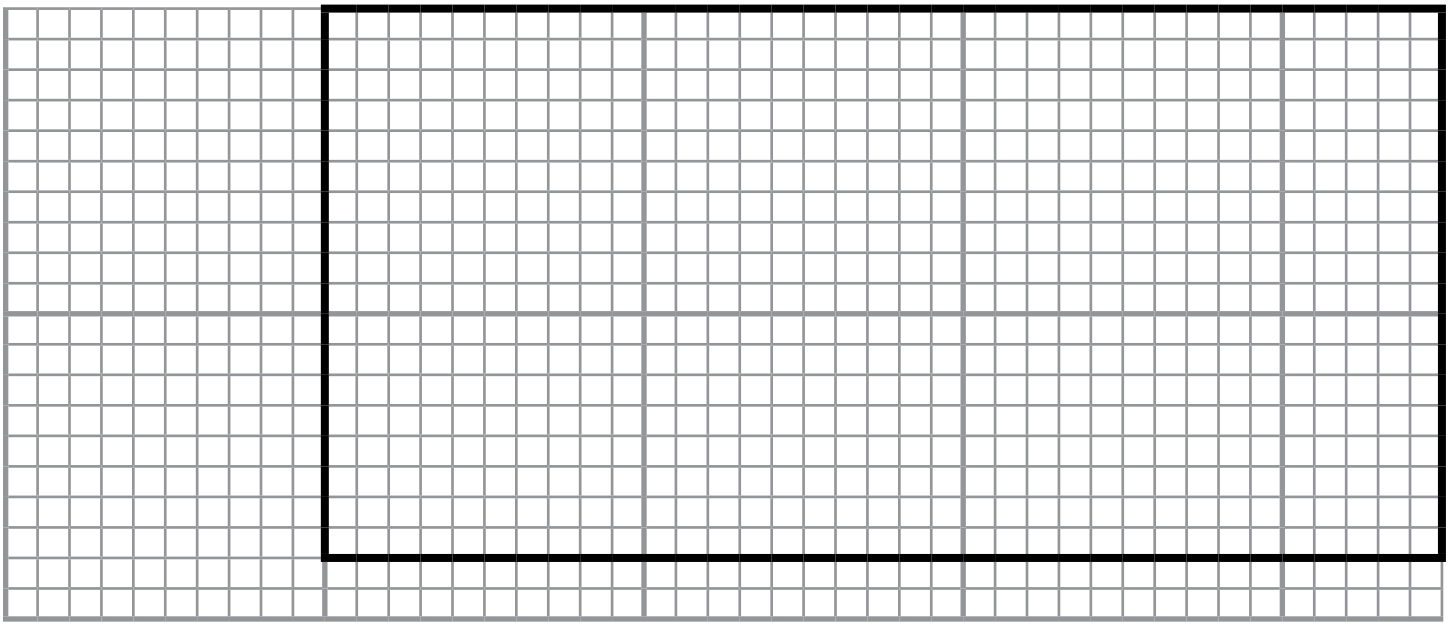
1.) Estimate:

18 × 35

↓ ↓

____ × ____ = _____

2.) Label the dimensions of the area model broken into partial products. List the partial products.



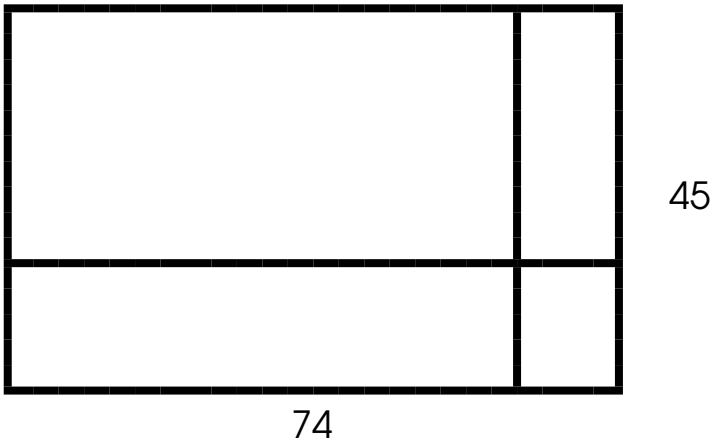
3.) Estimate the area, break apart the area model, label the dimensions, and then solve using partial products.

Estimate:

45 × 74

↓ ↓

____ × ____ = _____



4.) Break apart the area model. Label the dimensions, then solve using partial products.

Estimate:

24 × 48

↓ ↓

____ × ____ = _____

24 × 48

5.) Nyja reads 24 pages in her book each day. If she reads for 14 days, how many pages will she have read? Choose the correct way to break apart the factors.

A 10 + 10 + 4
10 + 4

B 12 + 12
7 + 7

C 22 + 4
12 + 2

D 20 + 4
10 + 4

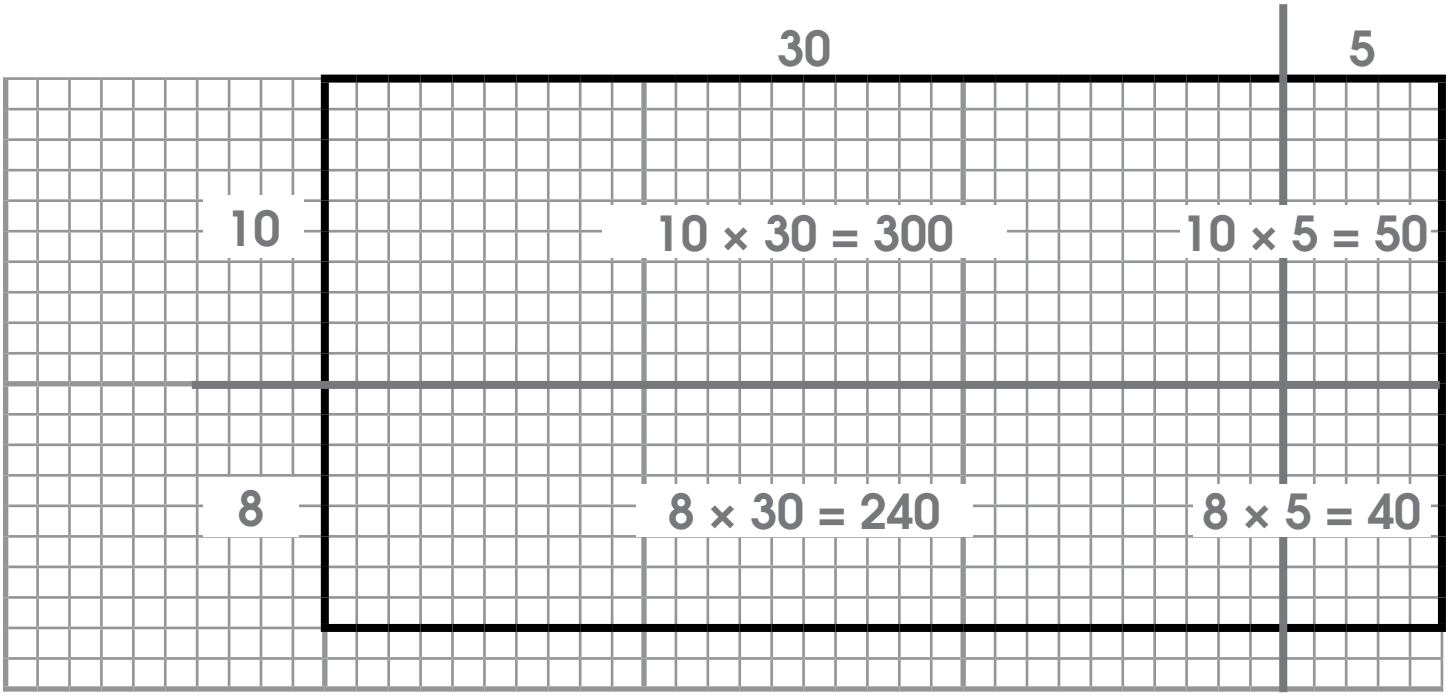
1.) Estimate:

18 × 35

↓ ↓

20 × 40 = 800

2.) Label the dimensions of the area model broken into partial products. List the partial products.



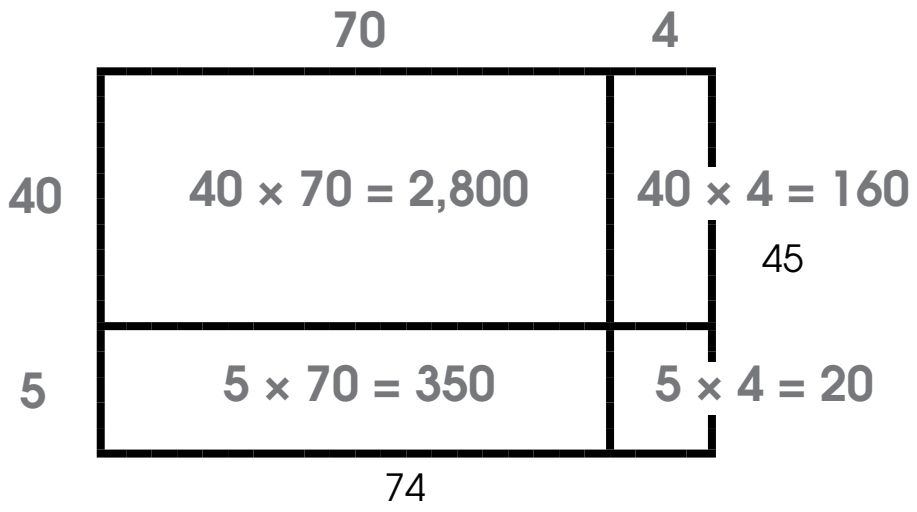
3.) Estimate the area, break apart the area model, label the dimensions, and then solve using partial products.

Estimate:

45 × 74

↓ ↓

50 × 70 = 3,500



2,800 + 160 = 2,960

350 + 20 = 370

2,960 + 370 = 3,330

4.) Break apart the area model. Label the dimensions, then solve using partial products.

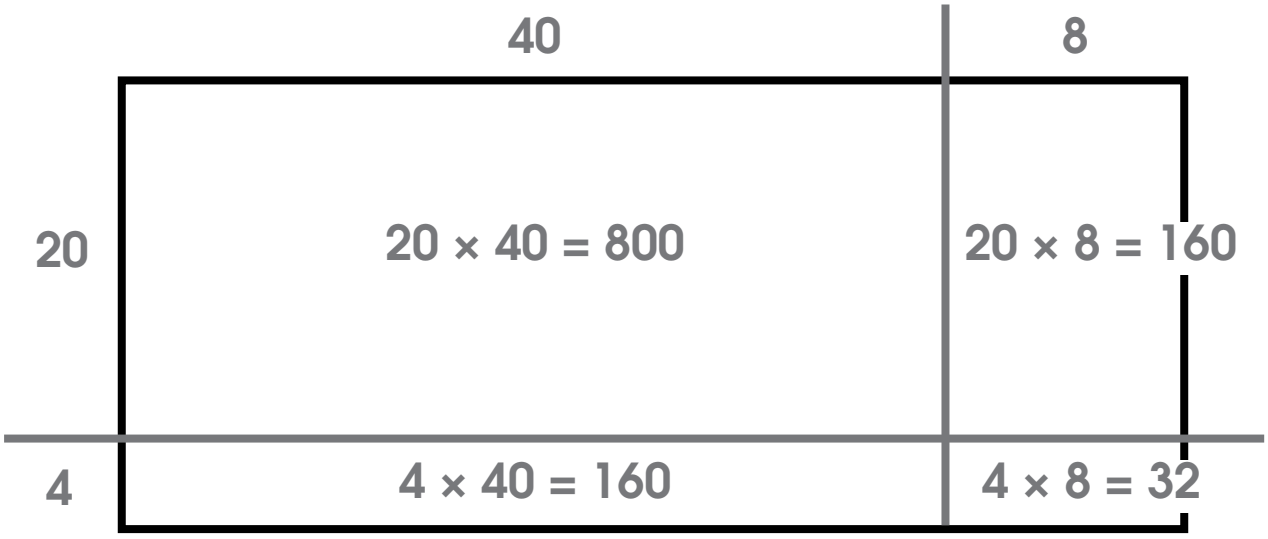
Estimate:

24 × 48

↓ ↓

20 × 50 = 1,000

24 × 48



800 + 160 = 960

160 + 32 = 192

960 + 192 = 1,152

5.) Nyja reads 24 pages in her book each day. If she reads for 14 days, how many pages will she have read? Choose the correct way to break apart the factors.

A 10 + 10 + 4
10 + 4

B 12 + 12
7 + 7

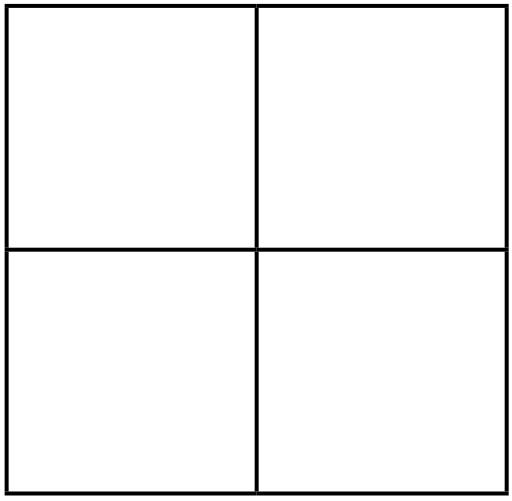
C 22 + 4
12 + 2

D 20 + 4
10 + 4

24 × 48

↓ ↓

_____ × _____ = _____



$$59 \times 71 \neq 1{,}039$$
$$5 \times 70 = 350$$
$$50 \times 1 = 50$$
$$1 \times 9 = 9$$
$$9 \times 70 = 630$$
$$350 \times 50 = 400$$
$$9 \times 630 = 639$$
$$400 \times 639 = 1{,}039$$

24 × 48

↓ ↓

20 × 50 = 1,000

	20	4
40	800	160
8	160	32

$$\begin{array}{r} 800 \\ +\ 160 \\ \hline 960 \end{array}$$

$$\begin{array}{r} 160 \\ +\ 32 \\ \hline 192 \end{array}$$

$$\begin{array}{r} 960 \\ +\ 192 \\ \hline 1{,}152 \end{array}$$

$59 \times 71 \neq 1{,}039$

$5 \times 70 = 350$

$50 \times 1 = 50$

$1 \times 9 = 9$

$9 \times 70 = 630$

$350 \times 50 = 400$

$9 \times 630 = 639$

$400 \times 639 = 1{,}039$

59×71

$\downarrow \quad \downarrow$

$60 \times 70 = 4{,}200$

	70	1
50	50 × 70 = 3,500	50 × 1 = 50
9	9 × 70 = 630	9 × 1 = 9

$3{,}500 + 50 = 3{,}550$

$630 + 9 = 639$

$3{,}550 + 639 = 4{,}189$

Use the partial-product method and multiplication square to solve.

1.) 37 × 68 = _____

37 × 68

↓ ↓

_____ × _____ = _____

2.) 29 × 42 = _____

29 × 42

↓ ↓

_____ × _____ = _____

STOP

Use the partial-product method and multiplication square to solve.

1.) 37 × 68 = 2,516

	60	8
30	30 × 60 = 1,800	30 × 8 = 240
7	7 × 60 = 420	7 × 8 = 56

37 × 68

↓ ↓

40 × 70 = 2,800

1,800 + 240 = 2,040

420 + 56 = 476

2,040 + 476 = 2,516

2.) 29 × 42 = 1,218

	40	2
20	20 × 40 = 800	20 × 2 = 40
9	40 × 9 = 360	9 × 2 = 18

29 × 42

↓ ↓

30 × 40 = 1,200

800 + 40 = 840

360 + 18 = 378

840 + 378 = 1,218

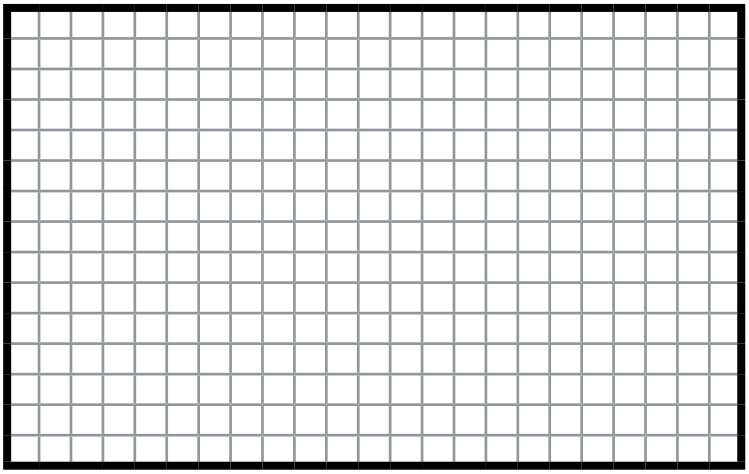
STOP

Solve using the partial-product method and the area model.

1.) 15 × 23

↓ ↓

_____ × _____ = _____



15 × 23 = _____

2.) 62 × 59

↓ ↓

_____ × _____ = _____

62 × 59 = _____

Solve using the partial-product method and the multiplication square.

3.) 76 × 43

↓ ↓

_____ × _____ = _____

76 × 43 = _____

Solve using the partial-product method and the multiplication square.

4.) 88 × 31

↓ ↓

_____ × _____ = _____

88 × 31 = _____

Choose the correct answer.

5.) Brittany was using the multiplication square to solve 92 × 87. Which square is correct?

A

	8	7
9		
2		

B

	80	7
90		
2		

C

	80	2
90		
7		

D

	8	2
9		
7		

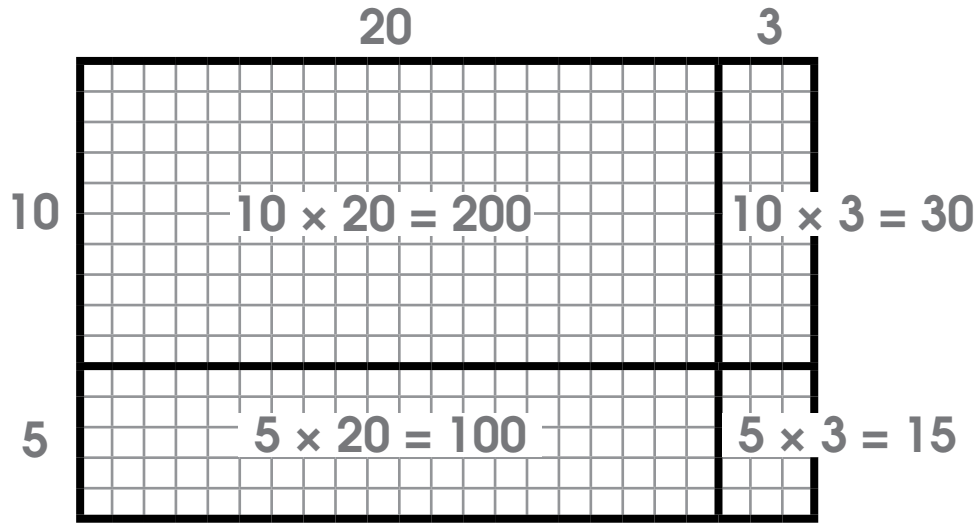
STOP

Solve using the partial-product method and the area model.

1.) 15 × 23

↓ ↓

20 × 20 = 400



200 + 30 = 230

100 + 15 = 115

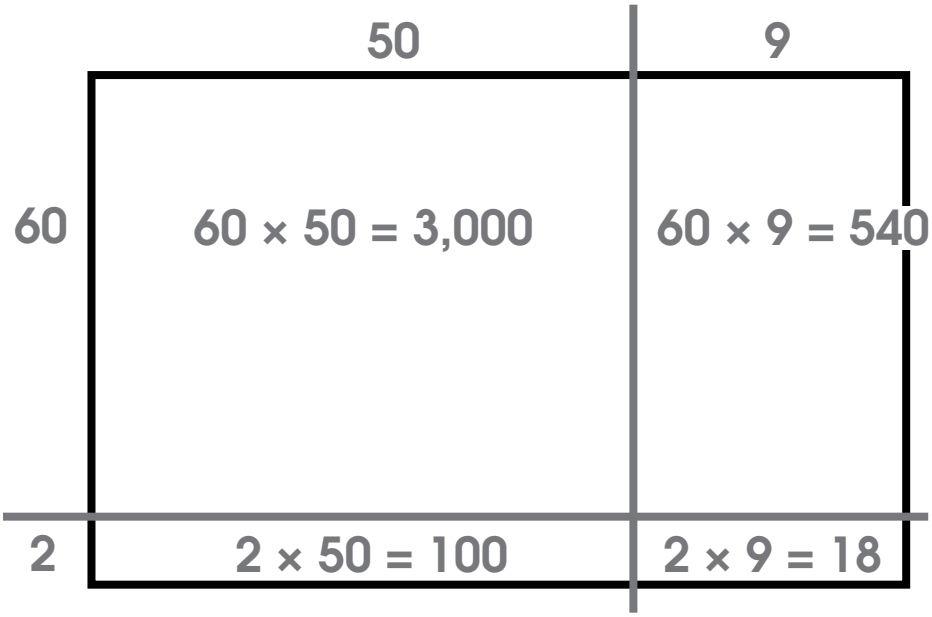
230 + 115 = 345

15 × 23 = 345

2.) 62 × 59

↓ ↓

60 × 60 = 3,600



3,000 + 540 = 3,540

100 + 18 = 118

3,540 + 118 = 3,658

62 × 59 = 3,658

Solve using the partial-product method and the multiplication square.

3.) 76 × 43

80 × 40 = 3,200

	40	3
70	70 × 40 = 2,800	70 × 3 = 210
6	6 × 40 = 240	6 × 3 = 18

2,800 + 210 = 3,010

240 + 18 = 258

3,010 + 258 = 3,268

76 × 43 = 3,268

Solve using the partial-product method and the multiplication square.

4.) 88 × 31

90 × 30 = 2,700

	30	1
80	80 × 30 = 2,400	80 × 1 = 80
8	8 × 30 = 240	8 × 1 = 8

2,400 + 80 = 2,480

240 + 8 = 248

2,480 + 248 = 2,728

88 × 31 = 2,728

Choose the correct answer.

5.) Brittany was using the multiplication square to solve 92 × 87. Which square is correct?

A

	8	7
9		
2		

C

	80	2
90		
7		

B

	80	7
90		
2		

D

	8	2
9		
7		

STOP

28 × 35

↓ ↓

30 × 40 = 1,200

	30	5
20	20 + 30 = 50	20 + 5 = 25
8	8 + 30 = 38	8 + 5 = 13

50 + 25 = 75

38 + 13 = 51

75 + 51 = 126

28 × 35

↓ ↓

30 × 40 = 1,200

	30	5
20	20 + 30 = 50	20 + 5 = 25
8	8 + 30 = 38	8 + 5 = 13

50 + 25 = 75

38 + 13 = 51

75 + 51 = 126

	30	5
20	20 × 30 = 600	20 × 5 = 100
8	8 × 30 = 240	8 × 5 = 40

600 + 100 = 700

240 + 40 = 280

700 + 280 = 980

STOP

45 × 64

↓ ↓

_____ × _____ = _____

Raul's car can drive 28 miles on 1 gallon of gas. If he used 37 gallons of gas this month, how far did he drive?

45 × 64

↓ ↓

50 × 60 = 3,000

	40	5
60	2,400	300
4	160	20

$$\begin{array}{r} 2{,}400 \\ +\ 300 \\ \hline 2{,}700 \end{array}$$

$$\begin{array}{r} 160 \\ +\ 20 \\ \hline 180 \end{array}$$

$$\begin{array}{r} 2{,}700 \\ +\ 180 \\ \hline 2{,}880 \end{array}$$

Raul's car can drive 28 miles on 1 gallon of gas. If he used 37 gallons of gas this month, how far did he drive?

28 × 37

↓ ↓

30 × 40 = 1,200

	20	8
30	600	240
7	140	56

$$\begin{array}{r} 600 \\ +\ 240 \\ \hline 840 \end{array}$$

$$\begin{array}{r} 140 \\ +\ \ 56 \\ \hline 196 \end{array}$$

$$\begin{array}{r} 840 \\ +\ 196 \\ \hline 1{,}036 \end{array}$$

Use the partial-product method and multiplication square to solve.

1.) 42 × 93

↓ ↓

____ × ____ = _____

42 × 93 = _____

2.) 15 × 82

↓ ↓

____ × ____ = _____

15 × 82 = _____

Use the partial-product method and multiplication square to solve.

1.) 42 × 93

↓ ↓

40 × 90 = 3,600

	90	3
40	3,600	120
2	180	6

3,600 + 120 = 3,720

180 + 6 = 186

3,720
+ 186
3,906

42 × 93 = 3,906

2.) 15 × 82

↓ ↓

20 × 80 = 1,600

	80	2
10	800	20
5	400	10

800 + 20 = 820

400 + 10 = 410

820 + 410 = 1,230

15 × 82 = 1,230

Choose the best answer.

1.) Phillip's work is shown below. He made a mistake but is not sure where. What mistake did Phillip make?

15 × 82

↓ ↓

40 × 40 = 1,600

	40	2
30	30 × 40 = 120	30 × 2 = 60
7	7 × 40 = 280	7 × 2 = 14

120 + 60 = 180

280 + 14 = 294

180 + 294 = 474

40 × 40 = 1,600

A 30 × 40 ≠ 120
B 30 × 2 ≠ 60
C 180 + 294 ≠ 474
D 40 × 40 ≠ 1,600

Use the partial-product method and multiplication square to solve.

2.) 81 × 13

↓ ↓

____ × ____ = _____

81 × 13 = _____

Use the partial-product method and multiplication square to solve.

3.) 55 × 94

↓ ↓

____ × ____ = _____

55 × 94 = _____

4.) 72 × 32

↓ ↓

____ × ____ = _____

72 × 32 = _____

Choose the correct answer.

5.) Mrs. Jimenez ordered 38 boxes of pencils for the schools. If there are 24 pencils in each box, how many total pencils did she order?

A

	20	4
30	600	160
8	240	80

600 + 160 = 760

240 + 80 = 320

760 + 320 = 1,080

B

	20	4
30	600	120
8	160	32

600 + 120 = 720

160 + 32 = 192

720 + 192 = 912

C

	8	4
30	240	120
20	100	80

240 + 120 = 360

100 + 80 = 240

360 + 240 = 600

D

	20	4
30	60	120
8	140	16

60 + 120 = 180

140 + 16 = 200

180 + 200 = 380

STOP

Choose the best answer.

1.) Phillip's work is shown below. He made a mistake but is not sure where. What mistake did Phillip make?

15 × 82

↓ ↓

40 × 40 = 1,600

	40	2
30	30 × 40 = 120	30 × 2 = 60
7	7 × 40 = 280	7 × 2 = 14

120 + 60 = 180

280 + 14 = 294

180 + 294 = 474

40 × 40 = 1,600

A 30 × 40 ≠ 120
B 30 × 2 ≠ 60
C 180 + 294 ≠ 474
D 40 × 40 ≠ 1,600

Use the partial-product method and multiplication square to solve.

2.) 81 × 13

↓ ↓

80 × 10 = 800

	10	3
80	800	240
1	10	3

800 + 240 = 1,040

10 + 3 = 13

1,040 + 13 = 1,053

81 × 13 = 1,053

Use the partial-product method and multiplication square to solve.

3.) 55 × 94

60 × 90 = 5,400

	90	4
50	4,500	200
5	450	20

4,500 + 200 = 4,700

450 + 20 = 470

4,700 + 470 = 5,170

55 × 94 = 5,170

4.) 72 × 32

70 × 30 = 2,100

	30	2
70	2,100	140
2	60	4

2,100 + 140 = 2,240

60 + 4 = 64

2,240 + 64 = 2,304

72 × 32 = 2,304

Choose the correct answer.

5.) Mrs. Jimenez ordered 38 boxes of pencils for the schools. If there are 24 pencils in each box, how many total pencils did she order?

A

	20	4
30	600	160
8	240	80

600 + 160 = 760

240 + 80 = 320

760 + 320 = 1,080

B

	20	4
30	600	120
8	160	32

600 + 120 = 720

160 + 32 = 192

720 + 192 = 912

C

	8	4
30	240	120
20	100	80

240 + 120 = 360

100 + 80 = 240

360 + 240 = 600

D

	20	4
30	60	120
8	140	16

60 + 120 = 180

140 + 16 = 200

180 + 200 = 380

Complete using the multiplication table.

1.) List the multiples of 6:

_____

2.) 17 ÷ 4 ≈ _____

_____ ÷ 4 ≈ _____

_____ ÷ 4 ≈ _____

3.) 29 ÷ 8 ≈ _____

_____ ÷ 8 ≈ _____

_____ ÷ 8 ≈ _____

4.) 51 ÷ 7 ≈ _____

_____ ÷ 7 ≈ _____

_____ ÷ 7 ≈ _____

Complete using the multiplication table.

1.) List the multiples of 6:

6, 12, 18, 24, 30, 36, 42, 48, 54, 60

2.) 17 ÷ 4 ≈ 4

16 ÷ 4 ≈ 4

20 ÷ 4 ≈ 5

3.) 29 ÷ 8 ≈ 4

24 ÷ 8 ≈ 3

32 ÷ 8 ≈ 4

4.) 51 ÷ 7 ≈ 7

49 ÷ 7 ≈ 7

56 ÷ 7 ≈ 8

_____ hundreds _____ tens _____ ones
Base-10 Form

_____
Standard Form

_____
Expanded Form

_____ hundreds _____ tens _____ ones
Base-10 Form

_____
Expanded Form

5 hundreds 6 tens 2 ones
Base-10 Form

562
Standard Form

500 + 60 + 2
Expanded Form

5 hundreds 5 tens 12 ones
Base-10 Form

500 + 50 + 12
Expanded Form

Using base-10 materials, write the number in different forms.

1.) Place 3 hundreds, 2 tens, and 4 ones on your desk.

What number did you build? _____
Standard Form

How many groups of 100? _____

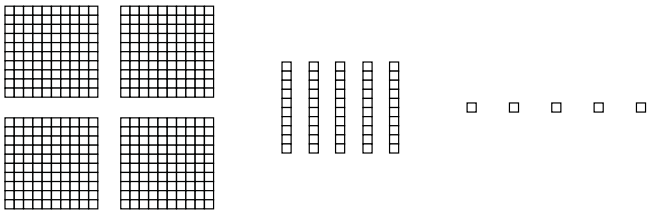
How many groups of 10? _____

How many groups of 1? _____

_____
Expanded Form

Break apart the number in another way. _____

Using the picture below, write the number in different forms.

2.) 

How many in all? _____
Standard Form

How many groups of 100? _____

How many groups of 10? _____

How many groups of 1? _____

_____
Expanded Form

Break apart the number in another way. _____

Using base-10 materials, write the number in different forms.

1.) Place 3 hundreds, 2 tens, and 4 ones on your desk.

What number did you build? 324
Standard Form

How many groups of 100? 3

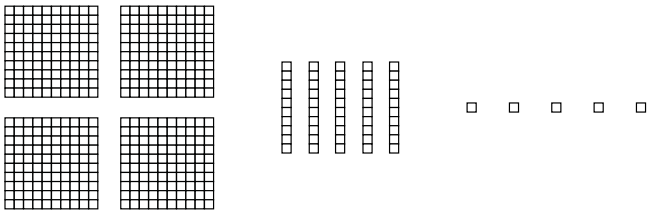
How many groups of 10? 2

How many groups of 1? 4

300 +20 + 4
Expanded Form

Break apart the number in another way. answers may vary

Using the picture below, write the number in different forms.

2.) 

How many in all? 455
Standard Form

How many groups of 100? 4

How many groups of 10? 5

How many groups of 1? 5

400 + 50 + 5
Expanded Form

Break apart the number in another way. answers may vary

Solve using the partial-product method and multiplication square.

1.) 45 × 26

↓ ↓

____ × ____ = _____

45 × 26 = _____

2.) 14 × 56

↓ ↓

____ × ____ = _____

14 × 56 = _____

3.) Place 7 hundreds, 5 tens, and 1 one in front of you.

What number did you build? _____
Standard Form

How many groups of 100? _____

How many groups of 10? _____

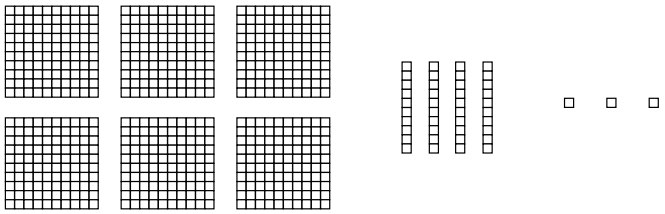
How many groups of 1? _____

_____
Expanded Form

Break apart the number in another way. _____

Using the picture below, write the number in different forms.

4.)



How many in all? _____
Standard Form

How many groups of 100? _____

How many groups of 10? _____

How many groups of 1? _____

_____
Expanded Form

Break apart the number in another way. _____

Choose the best answer.

5.) Jerry is using the partial-product method to decompose 412. He writes 400 + 10 + 2 for the expanded form, and then breaks apart each value. What is another way Jerry can write this number?

A 400 + 20 + 1
B 300 + 20 + 2
C 300 + 12
D 300 + 110 + 2

STOP

Solve using the partial-product method and multiplication square.

1.) 45 × 26

50 × 30 = 1,500

	20	6
40	800	240
5	100	30

800 + 240 = 1,040

100 + 30 = 130

1,040 + 130 = 1,170

45 × 26 = 1,170

2.) 14 × 56

10 × 60 = 600

	50	6
10	500	60
4	200	24

500 + 60 = 560

200 + 24 = 225

560 + 224 = 784

14 × 56 = 784

3.) Place 7 hundreds, 5 tens, and 1 one in front of you.

What number did you build? 751
Standard Form

How many groups of 100? 7

How many groups of 10? 5

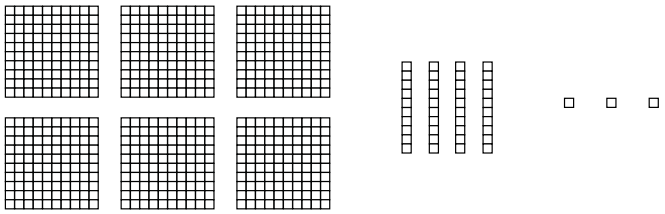
How many groups of 1? 1

700 + 50 + 1
Expanded Form

Break apart the number in another way. answers may vary

Using the picture below, write the number in different forms.

4.)



How many in all? 643
Standard Form

How many groups of 100? 6

How many groups of 10? 4

How many groups of 1? 3

600 + 40 + 3
Expanded Form

Break apart the number in another way. answers may vary

Choose the best answer.

5.) Jerry is using the partial-product method to decompose 412. He writes 400 + 10 + 2 for the expanded form, and then breaks apart each value. What is another way Jerry can write this number?

A 400 + 20 + 1
B 300 + 20 + 2
C 300 + 12
D 300 + 110 + 2

STOP

1.) _____

Standard Form

_____ hundreds _____ tens _____ ones

Base-10 Form

_____

Expanded Form

2.) _____

Standard Form

_____ hundreds _____ tens _____ ones

Base-10 Form

_____

Expanded Form

3.) _____

Standard Form

_____ hundreds _____ tens _____ ones

Base-10 Form

_____

Expanded Form

4.) _____

Standard Form

_____ hundreds _____ tens _____ ones

Base-10 Form

_____

Expanded Form

1.) 334
Standard Form

3 hundreds 3 tens 4 ones
Base-10 Form

300 + 30 + 4
Expanded Form

2.) 187
Standard Form

1 hundreds 8 tens 7 ones
Base-10 Form

100 + 80 + 7
Expanded Form

3.) 863
Standard Form

8 hundreds 6 tens 3 ones
Base-10 Form

800 + 60 + 3
Expanded Form

4.) 902

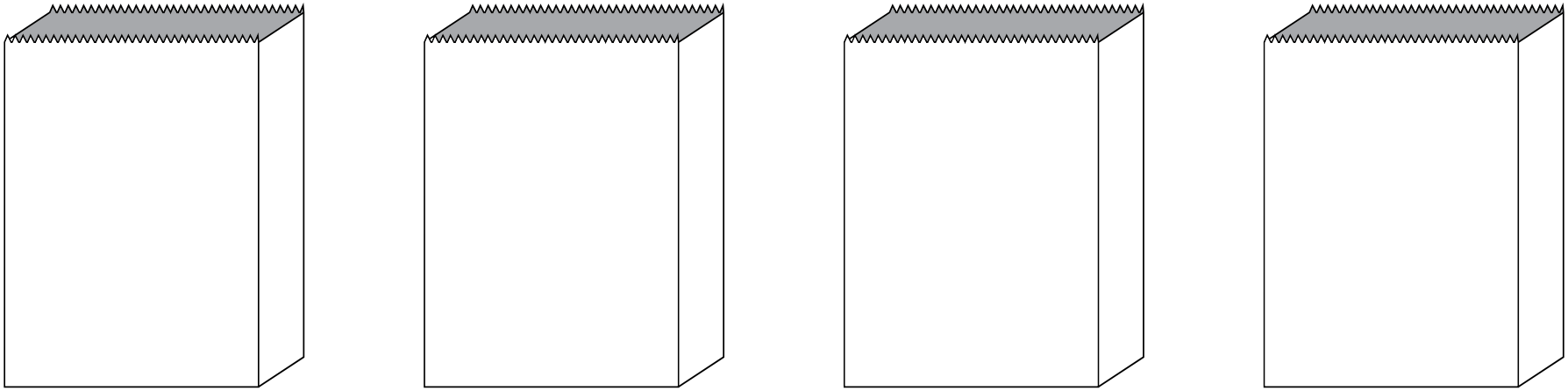
Standard Form

9 hundreds 0 tens 2 ones

Base-10 Form

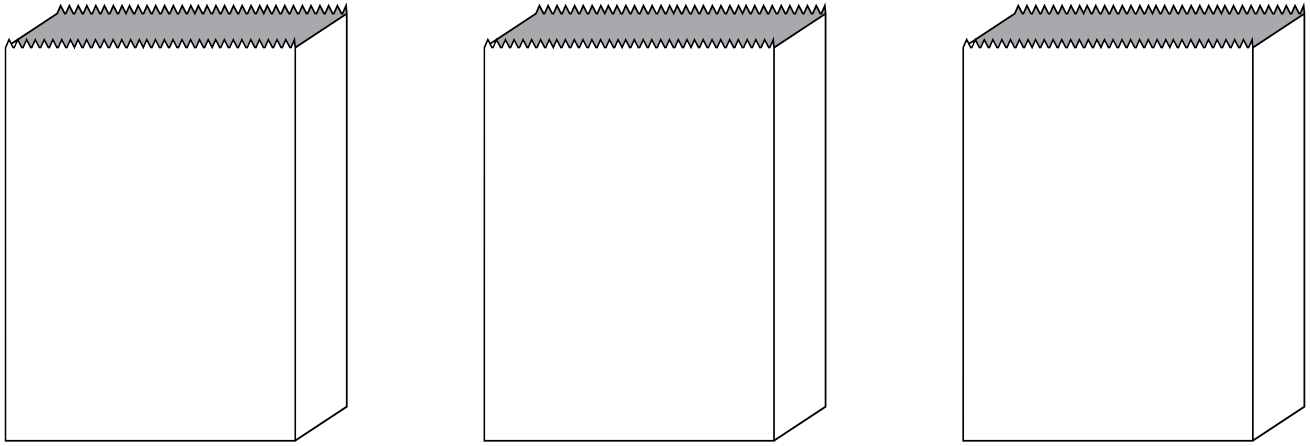
900 + 2

Expanded Form



_____	_____	÷	_____	=	_____	_____	R _____
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share	Remainder
Dividend					Quotient		

STOP

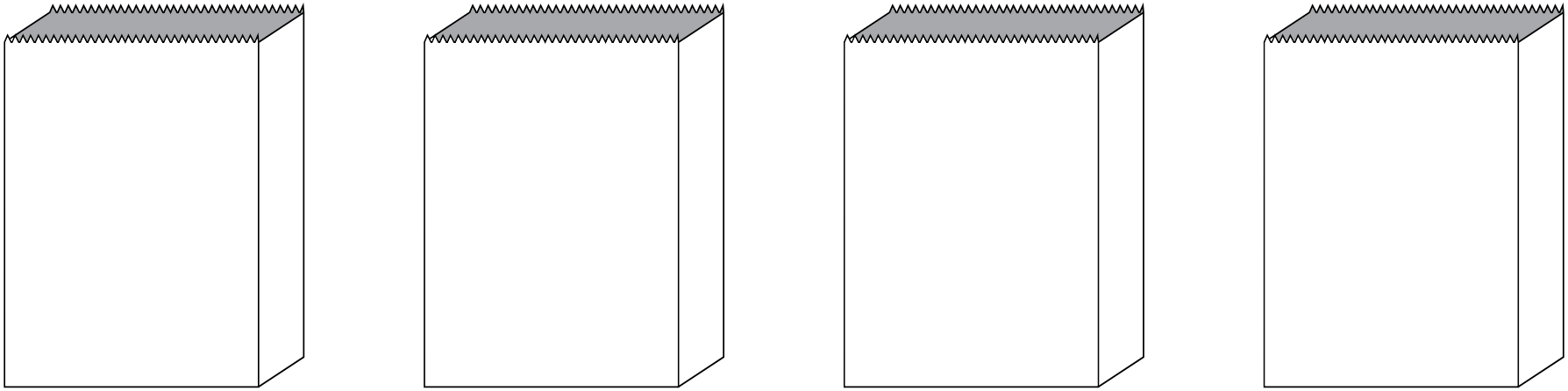


____	____	____	÷	____	=	____	____	____	R ____
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

____ Dividend

____ Quotient

STOP

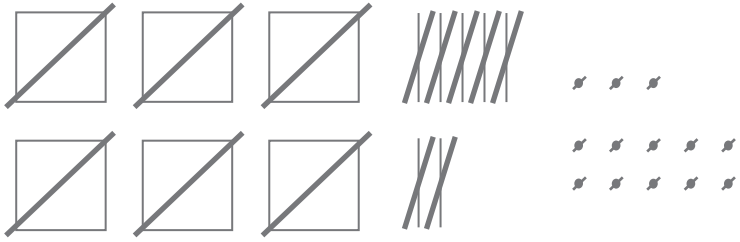


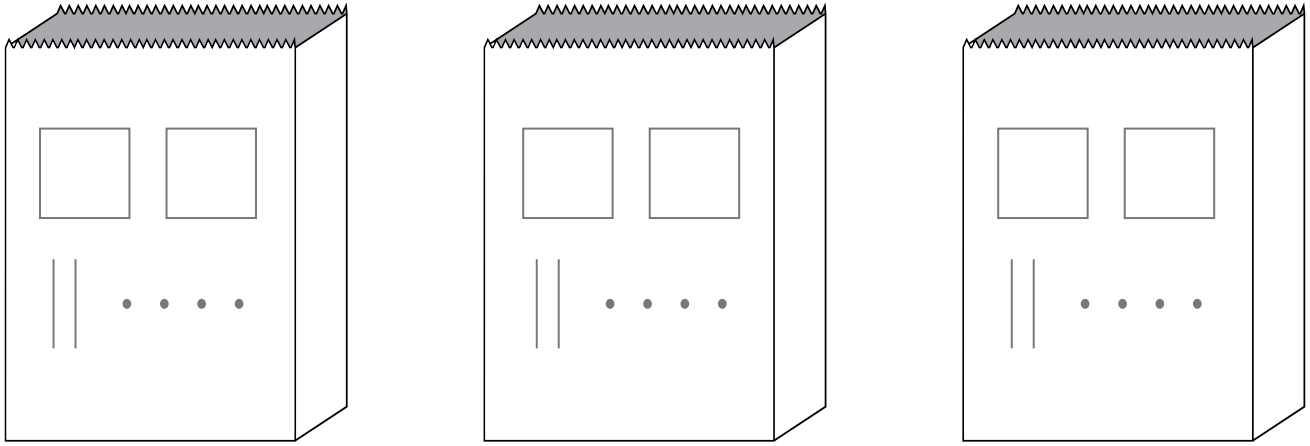
24	2	÷	4	=	6	0	R 2
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share	Remainder

242
Dividend

60
Quotient

STOP





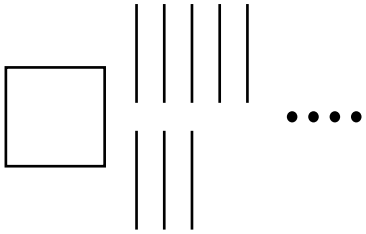
6	7	3	÷	3	=	2	2	4	R 1
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

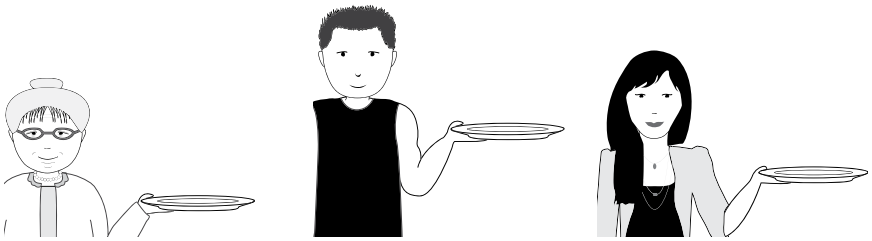
673
Dividend

224
Quotient

STOP

Use the base-10 picture of hundreds, tens, and ones to fill in the blanks and solve.

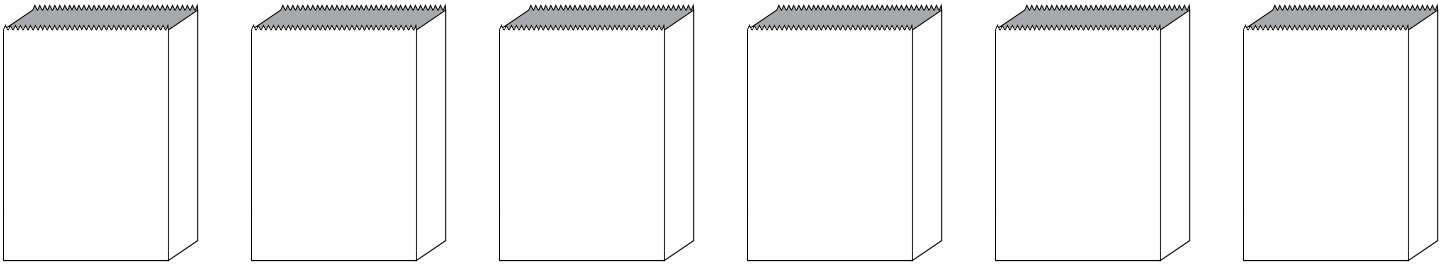
1.) 184 candies or 



____	____	÷ ____	= ____	____	R ____
Tens	Ones	Divisor	Tens Equal Share	Ones Equal Share	Remainder

Dividend ____ Quotient ____

2.) 743 candies 



____	____	____	÷	____	=	____	____	____	R ____
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

Dividend

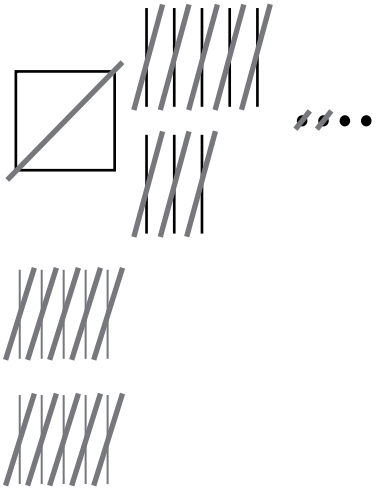
Quotient

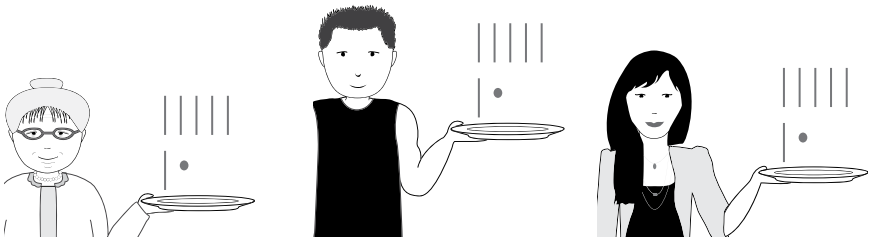
Draw a base-10 picture to solve.

3.) Peter was helping out at his uncle's store. He was given 4 piñatas and 895 pieces of candy and prizes. The piñatas cost $24 each. Peter's uncle told him to fill each piñata with the same amount of candy and prizes. How many pieces of candy and prizes will Peter put in each piñata?

____ ____ ____	÷	____	=	____ ____ ____	R ____
Dividend		Divisor		Quotient	Remainder

Use the base-10 picture of hundreds, tens, and ones to fill in the blanks and solve.

1.) 184 candies or 

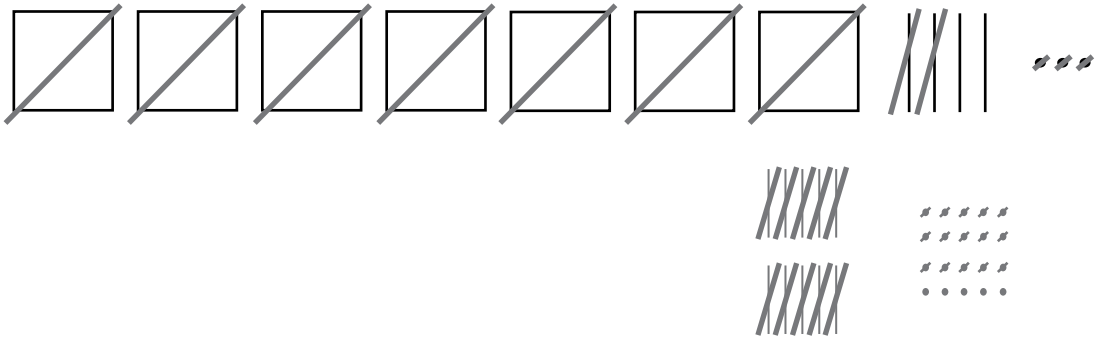


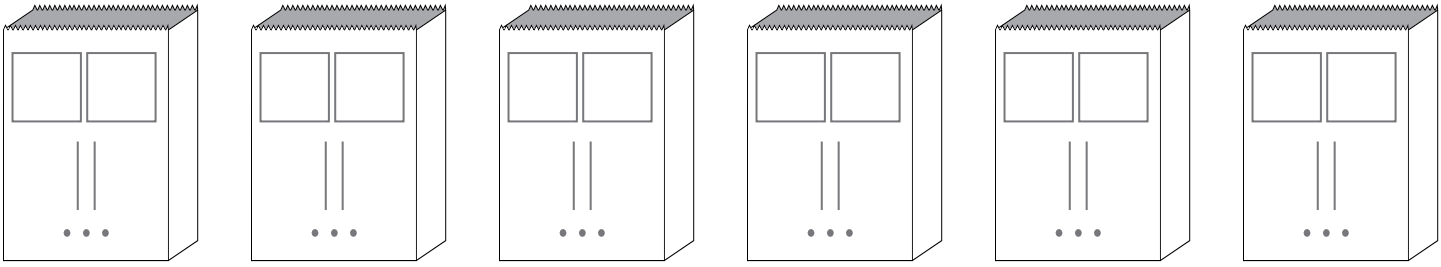
18	4	÷	3	=	6	1		R 1
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share		Remainder

184 Dividend

61 Quotient

2.) 743 candies





7	4	3	÷	6	=	1	2	3	R	5
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share		Remainder

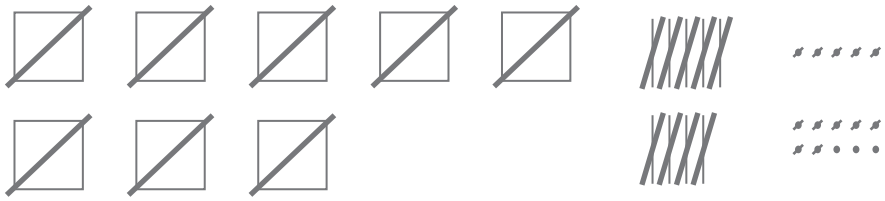
743
Dividend

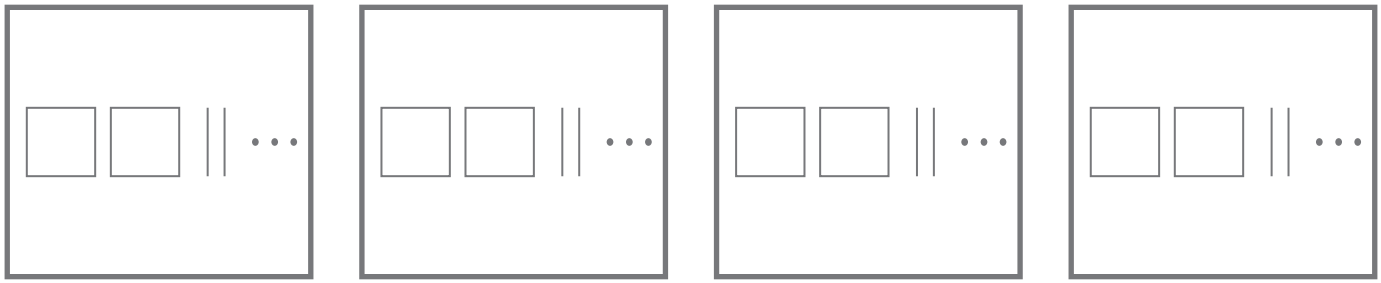
123
Quotient

Draw a base-10 picture to solve.

3.) Peter was helping out at his uncle's store. He was given 4 piñatas and 895 pieces of candy and prizes. The piñatas cost $24 each. Peter's uncle told him to fill each piñata with the same amount of candy and prizes. How many pieces of candy and prizes will Peter put in each piñata?

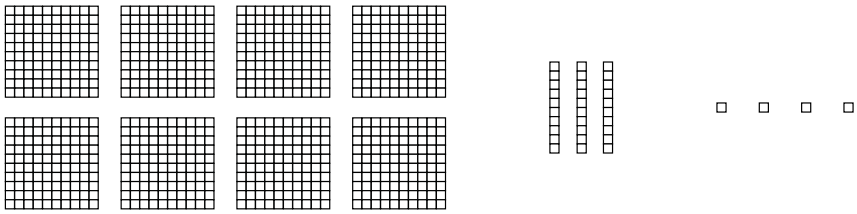
8	9	5	÷	4	=	2	2	3	R	3
	Dividend			Divisor			Quotient			Remainder





Using the picture below, write the number in different forms.

1.)



How many in all? _____
Standard Form

How many groups of 100? _____

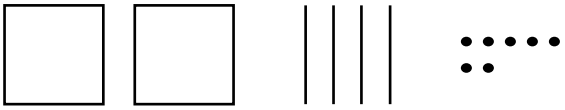
How many groups of 10? _____

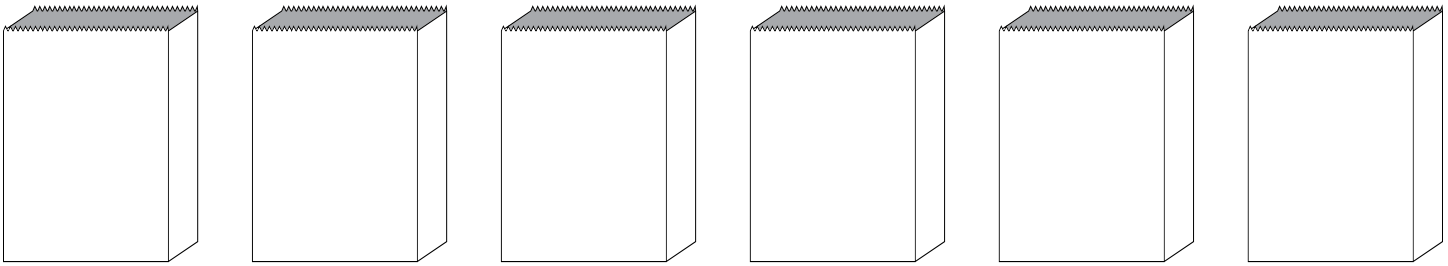
How many groups of 1? _____

_____
Expanded Form

2.) Write another way to break apart the number. _____

Use the base-10 picture of hundreds, tens, and ones to fill in the blanks and solve.

3.) 247 gems or 

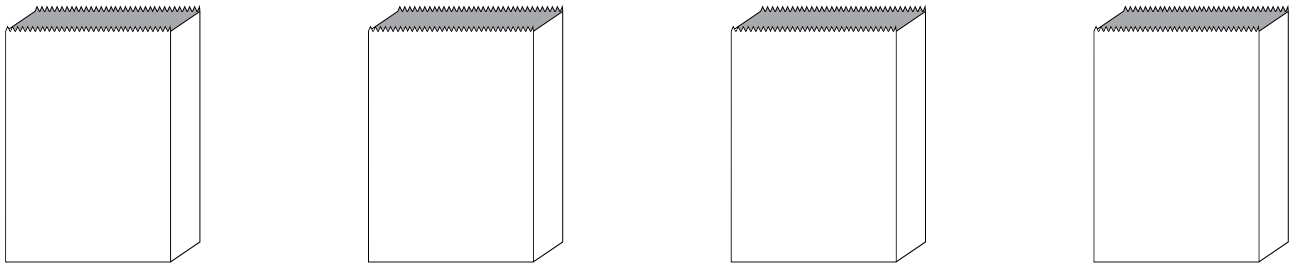


____	____	÷	____	=	____	____	R ____
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share	Remainder

Dividend ____ Quotient ____

Use the base-10 picture of hundreds, tens, and ones to fill in the blanks and solve.

4.) 936 gems or



___	___	___	÷	___	=	___	___	___	R ___
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

Dividend

Quotient

Choose the correct answer.

5.) Mariel collected shells on the beach. She wanted to fill 3 baskets with shells to give to her sisters. Mariel collected 128 shells in all. Which equation is correct for how Mariel should divide her shells equally into 3 baskets?

A 128 ÷ 3 = 42 R 2

B 128 ÷ 3 = 384

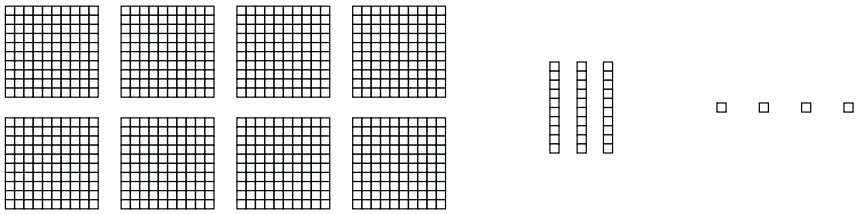
C 128 × 3 = 384

D 3 ÷ 128 = 42 R 2

STOP

Using the picture below, write the number in different forms.

1.)



How many in all? 834
Standard Form

How many groups of 100? 8

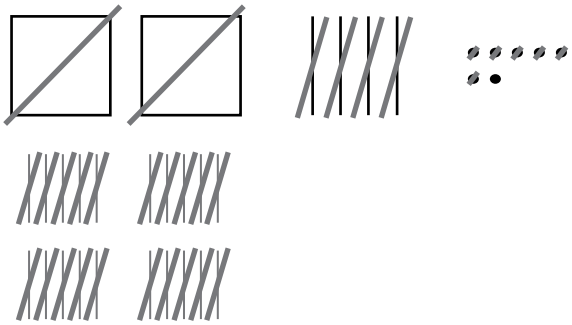
How many groups of 10? 3

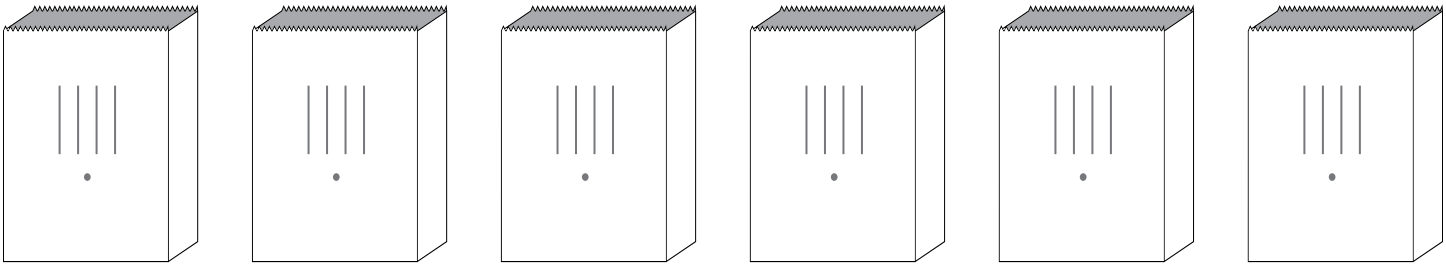
How many groups of 1? 4

800 + 40 + 3
Expanded Form

2.) Write another way to break apart the number. answers may vary

Use the base-10 picture of hundreds, tens, and ones to fill in the blanks and solve.

3.) 247 gems or 



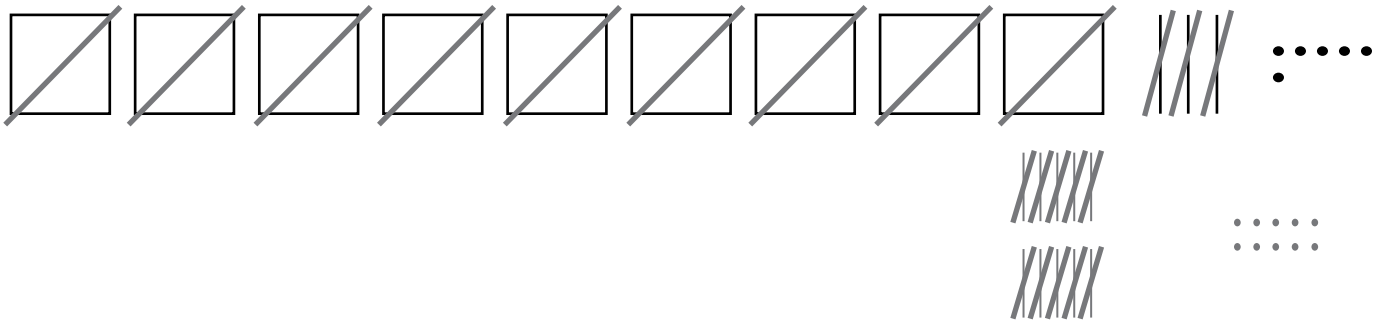
14	7	÷	4	=	3	6	R	3
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share		Remainder

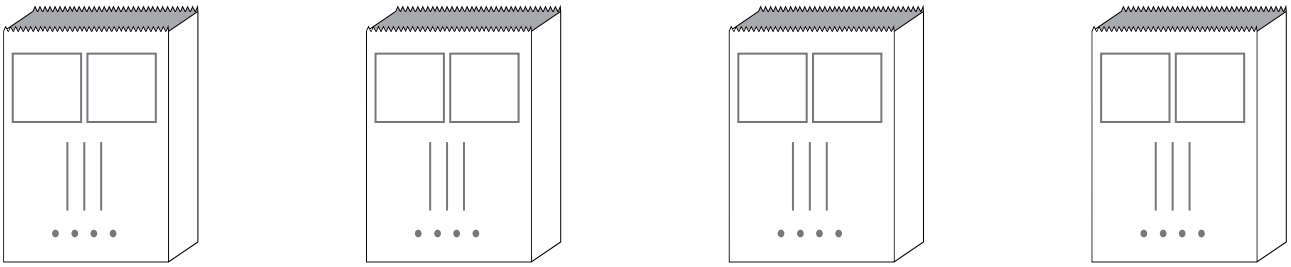
147
Dividend

36
Quotient

Use the base-10 picture of hundreds, tens, and ones to fill in the blanks and solve.

4.) 936 gems or





9	3	6	÷	4	=	2	3	4	R	0
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share		Remainder

936 Dividend

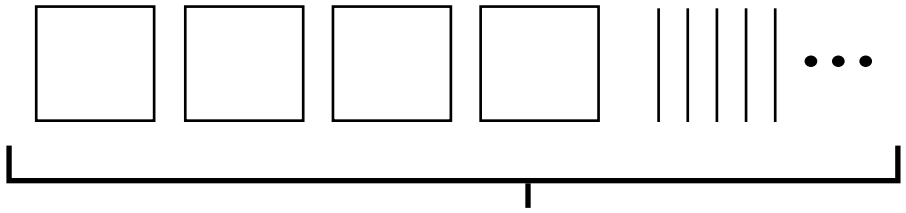
234 Quotient

Choose the correct answer.

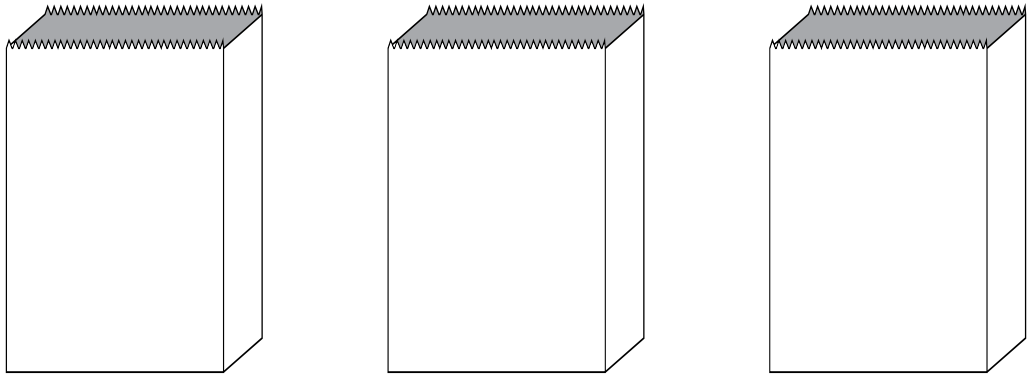
5.) Mariel collected shells on the beach. She wanted to fill 3 baskets with shells to give to her sisters. Mariel collected 128 shells in all. Which equation is correct for how Mariel should divide her shells equally into 3 baskets?

A 128 ÷ 3 = 42 R 2
B 128 ÷ 3 = 384
C 128 × 3 = 384
D 3 ÷ 128 = 42 R 2

STOP



Erasers



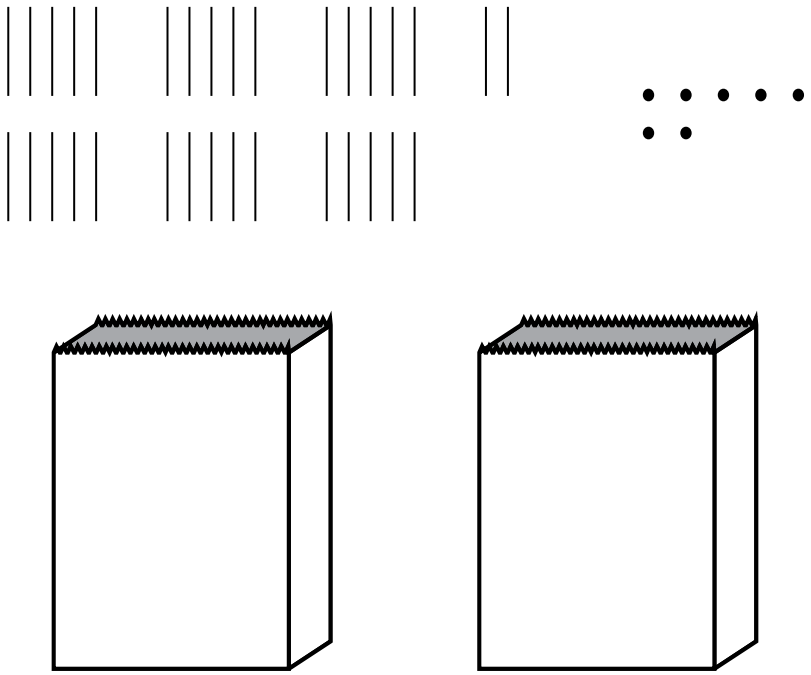
___	___	___	÷	___	=	___	___	___	R ___
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

___ Dividend

___ Quotient

STOP

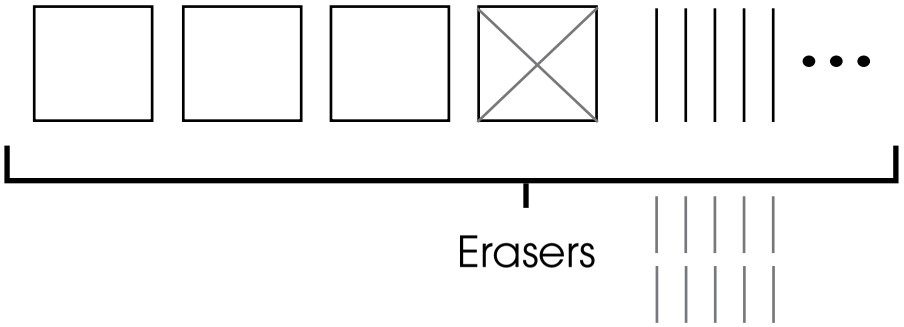
Donovan was given the division problem 327 ÷ 2. He decided to draw a base-10 picture to help solve the problem. Is this the most efficient way to solve this problem?

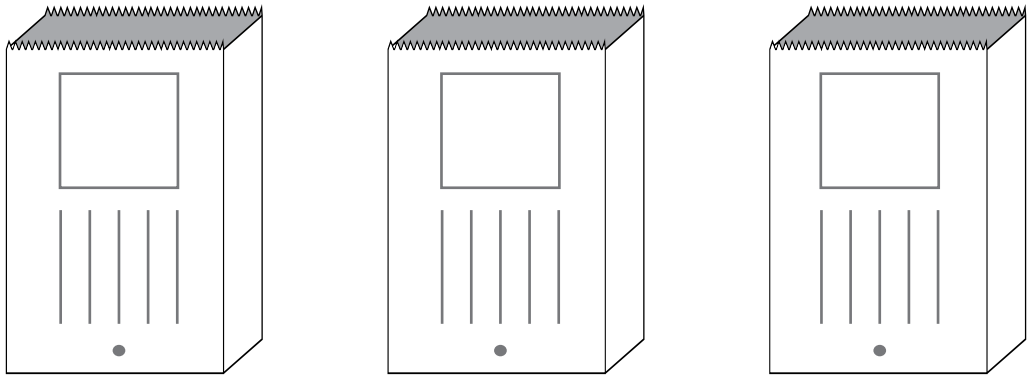


____	____	____	÷	____	=	____	____	____	R ____
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

____ Dividend

____ Quotient





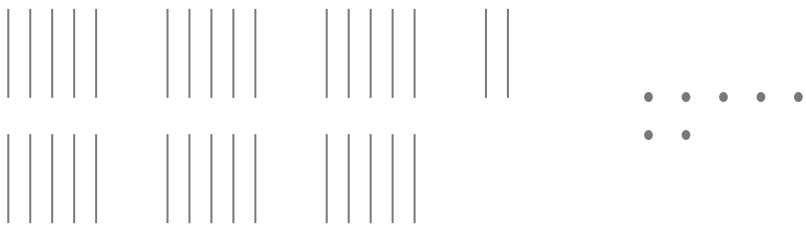
4	5	3	÷	3	=	1	5	1	R 0
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

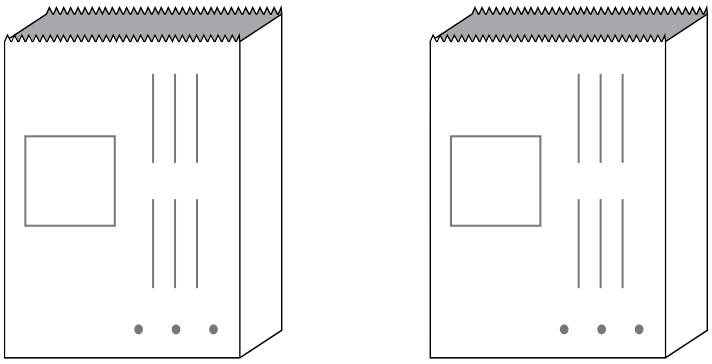
453
Dividend

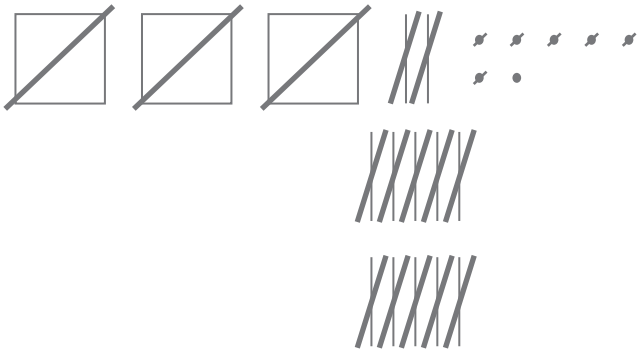
151
Quotient

STOP

Donovan was given the division problem 327 ÷ 2. He decided to draw a base-10 picture to help solve the problem. Is this the most efficient way to solve this problem?





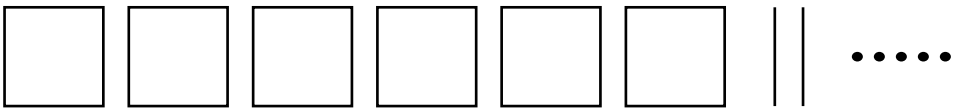


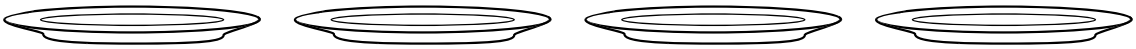
3	2	7	÷	2	=	1	6	3	R 1
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

327
Dividend

163
Quotient

Use the base-10 picture to fill in the blanks and solve.

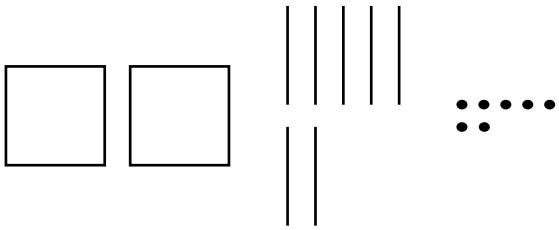
1.) 



____	____	____	÷	____	=	____	____	____	R ____
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

____ Dividend

____ Quotient

2.) 

____	____	÷	____	=	____	____	R ____
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share	Remainder

____ Dividend

____ Quotient

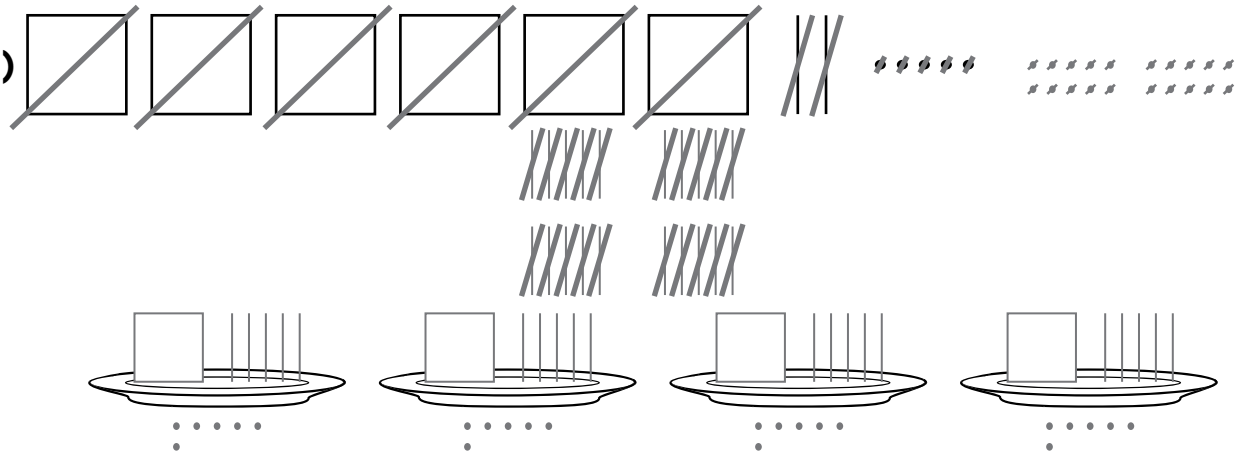
Draw a base-10 picture to solve.

3.) There were a total of 495 fans at the 3 play-off games. If the same number of fans attend each game, how many fans attended the first game?

What is the problem asking you to find?

Use the base-10 picture to fill in the blanks and solve.

1.)

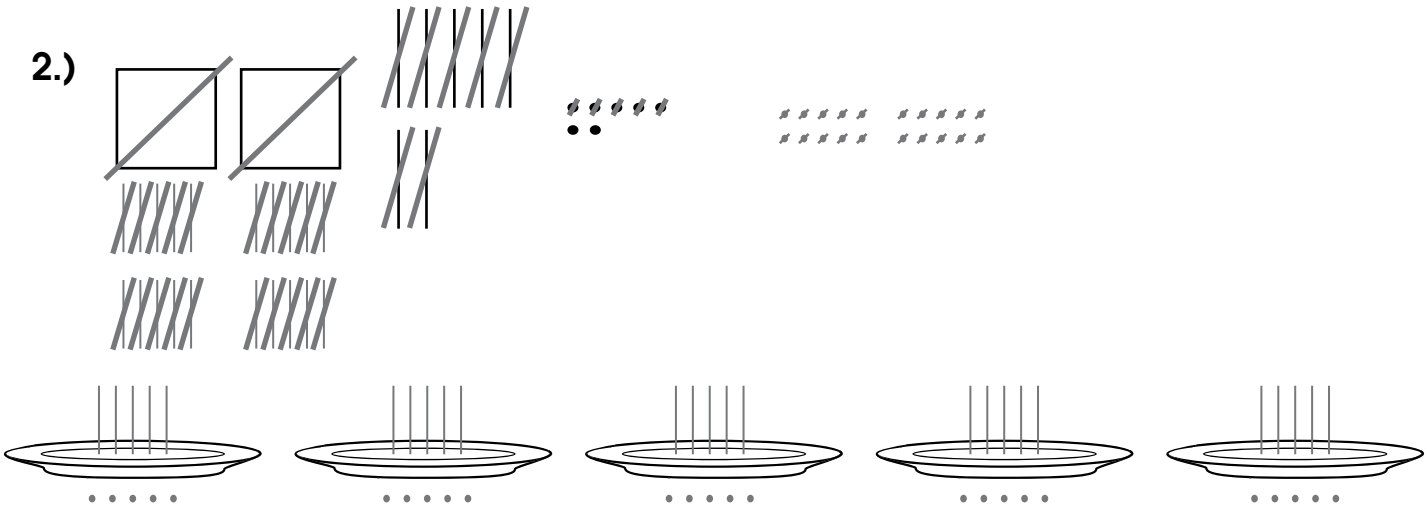


6	2	5	÷	4	=	1	5	6	R	1
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share		Remainder

625
Dividend

156
Quotient

2.)



27	7	÷	5	=	5	5	R	2
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share		Remainder

277
Dividend

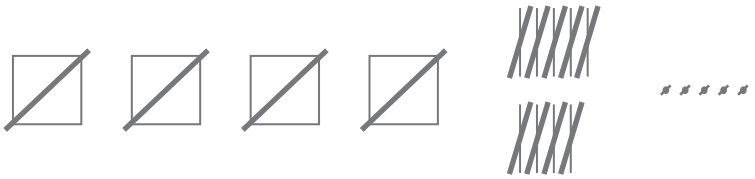
55
Quotient

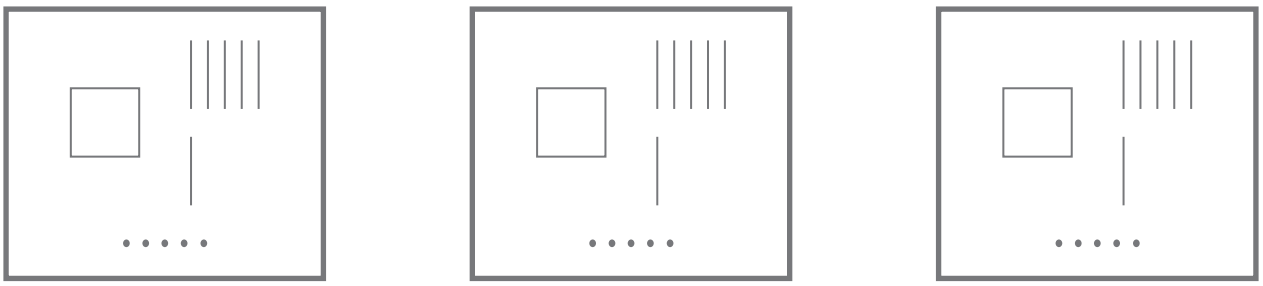
Draw a base-10 picture to solve.

3.) There were a total of 495 fans at the 3 play-off games. If the same number of fans attend each game, how many fans attended the first game?

What is the problem asking you to find?

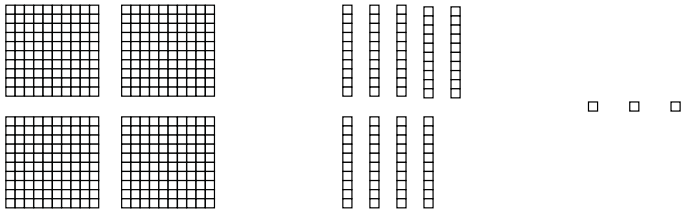
number of fans at a game





165 fans

1.) Use the base-10 picture to answer the questions below.



How many in all? _____
Standard Form

How many groups of 100? _____

How many groups of 10? _____

How many groups of 1? _____

_____
Expanded Form

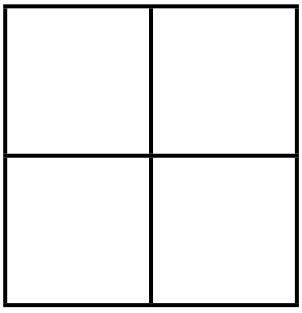
2.) Write another way to break apart the number. _____

Use the partial-product method and multiplication square to solve.

3.) 26 × 84

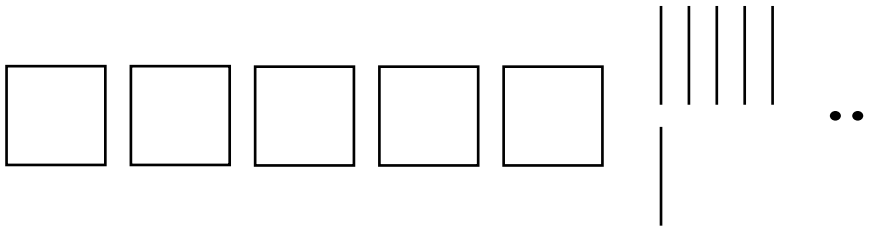
↓ ↓

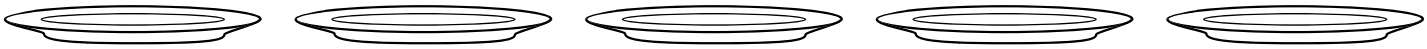
____ × ____ = _____



26 × 84 = _____

Use the base-10 picture to fill in the blanks and solve.

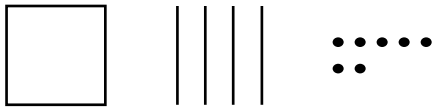
4.) 



___	___	___	÷	___	=	___	___	___	R ___
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

Dividend

Quotient

5.) 

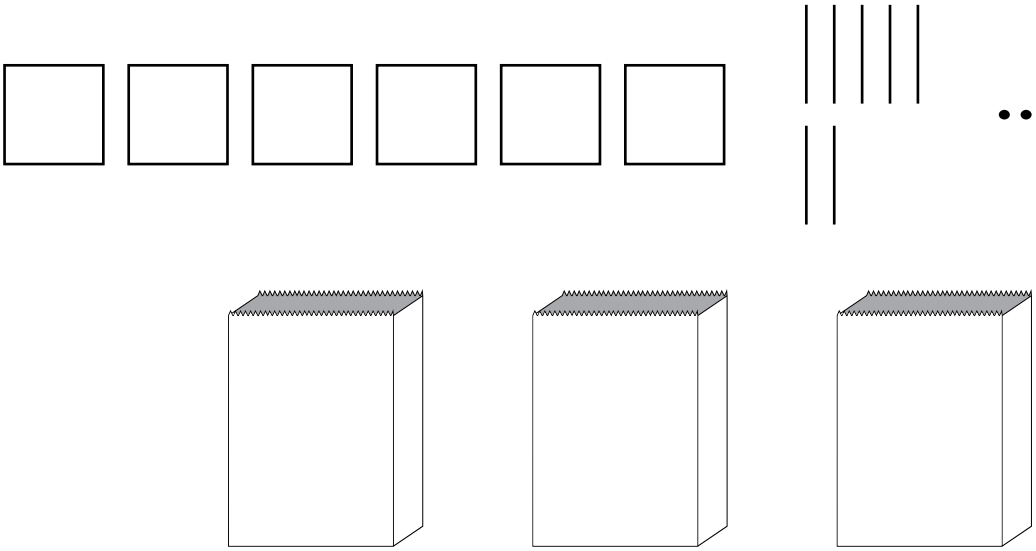
___	___	÷	___	=	___	___	R ___
Tens	Ones		Divisor		Tens Equal Share	Ones Equal Share	Remainder

Dividend

Quotient

Use the base-10 picture to fill in the blanks and solve.

6.)

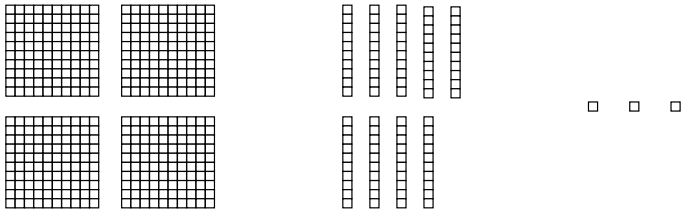


____	____	____	÷	____	=	____	____	____	R ____
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share	Remainder

Dividend

Quotient

1.) Use the base-10 picture to answer the questions below.



How many in all? 493
Standard Form

How many groups of 100? 4

How many groups of 10? 9

How many groups of 1? 3

400 + 90 + 3
Expanded Form

2.) Write another way to break apart the number. answers may vary

Use the partial-product method and multiplication square to solve.

3.) 26 × 84

30 × 80 = 2,400

	80	4
20	1,600	80
6	480	24

1,600 + 80 = 1,680

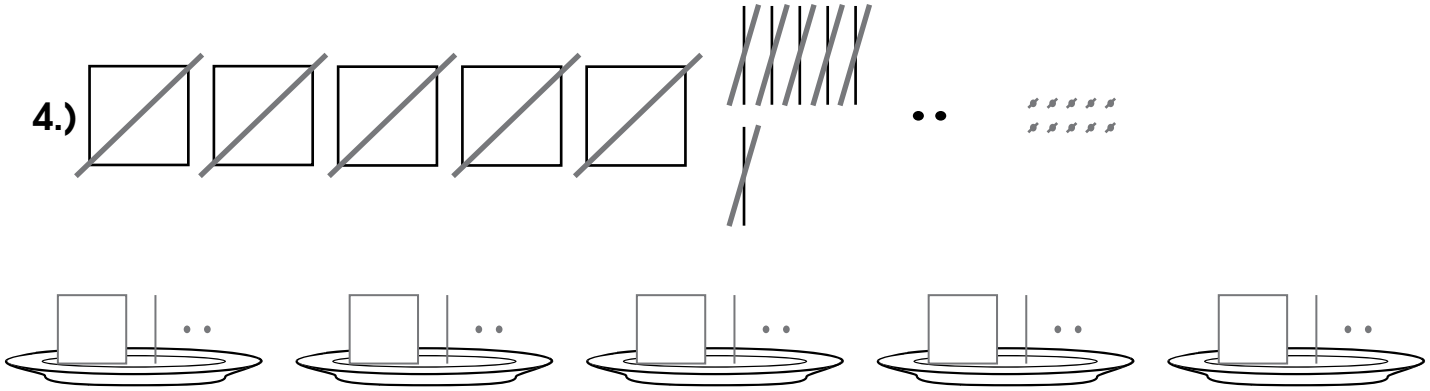
480 + 24 = 504

1,680 + 504 = 2,184

26 × 84 = 2,184

Use the base-10 picture to fill in the blanks and solve.

4.)

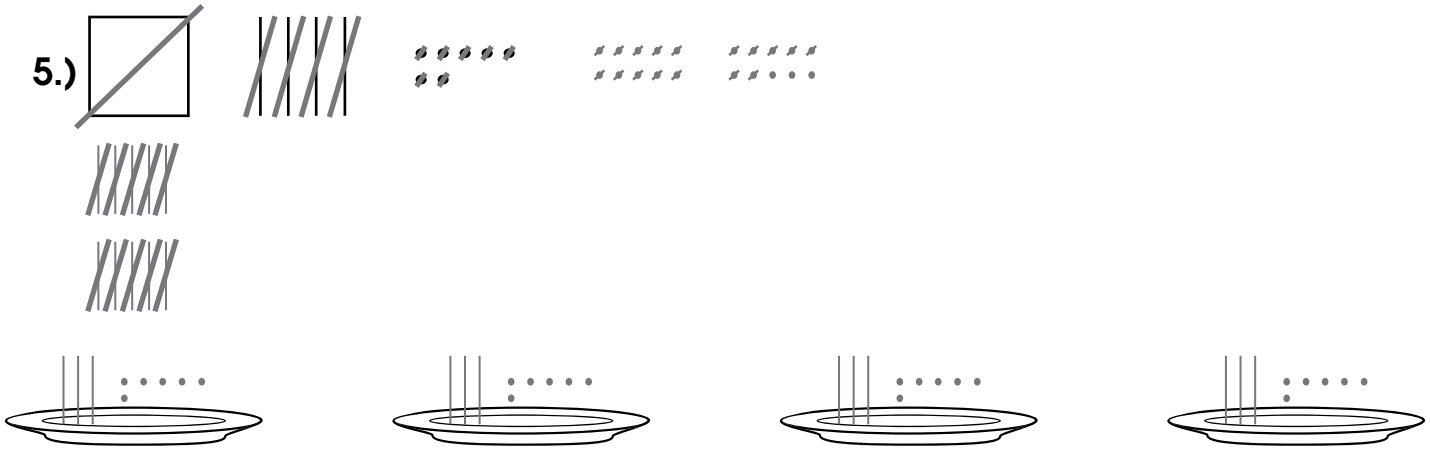


5 Hundreds 6 Tens 2 Ones ÷ 5 Divisor = 1 Hundreds Equal Share 1 Tens Equal Share 2 Ones Equal Share R 2 Remainder

562 Dividend

112 Quotient

5.)



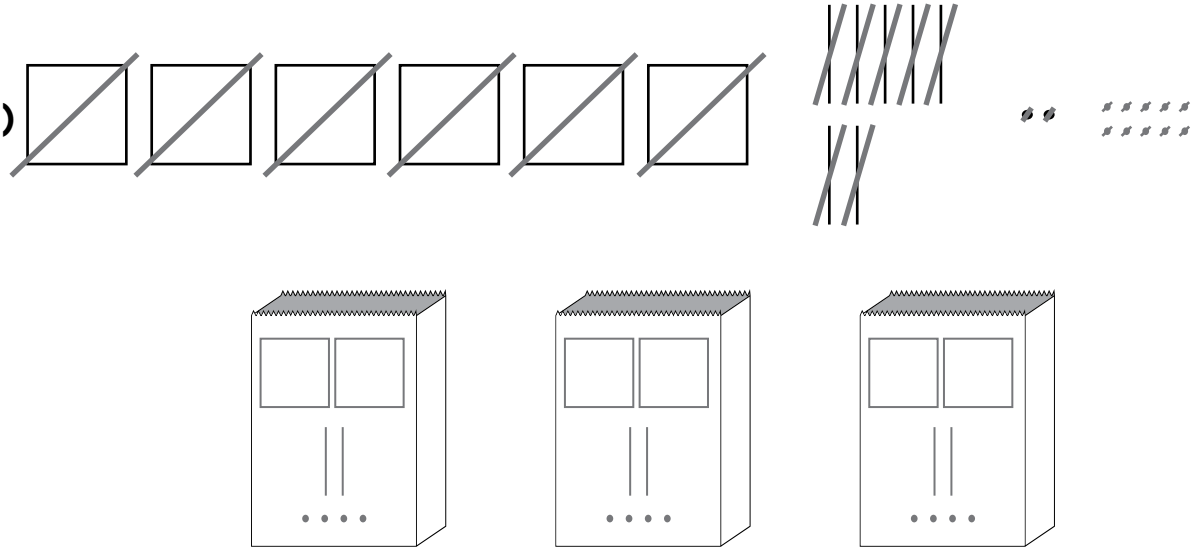
14 Tens 7 Ones ÷ 4 Divisor = 3 Tens Equal Share 6 Ones Equal Share R 3 Remainder

147 Dividend

36 Quotient

Use the base-10 picture to fill in the blanks and solve.

6.)



6	7	2	÷	3	=	2	2	4	R	0
Hundreds	Tens	Ones		Divisor		Hundreds Equal Share	Tens Equal Share	Ones Equal Share		Remainder

672
Dividend

224
Quotient

Estimate the answer to the problems below.

1.) 39 × 6

↓ ↓

_____ × _____ = _____

2.) 51 × 59

↓ ↓

_____ × _____ = _____

3.) 55 ÷ 9 or n × _____ = _____

Multiples of 9: _____

Estimation: _____ ÷ 9 = _____

_____ ÷ 9 = _____

55 ÷ 9 ≈ _____

4.) 321 ÷ 7 or n × _____ = _____

Multiples of 7: _____

Estimation: _____ ÷ 7 = _____

_____ ÷ 7 = _____

312 ÷ 7 ≈ _____

STOP

Estimate the answer to the problems below.

1.) 39 × 6

↓ ↓

40 × 5 = 200

2.) 51 × 59

↓ ↓

50 × 60 = 3000

3.) 55 ÷ 9 or n × 9 = 55

Multiples of 9: 27, 36, 45, 54, 63

Estimation: 54 ÷ 9 = 6

63 ÷ 9 = 7

55 ÷ 9 ≈ 6

4.) 321 ÷ 7 or n × 7 = 321

Multiples of 7: 28, 35

Estimation: 28 ÷ 7 = 4

35 ÷ 7 = 5

312 ÷ 7 ≈ 50

1.) The Bulldogs basketball team scored 103 points at Thursday night's game. Most of the points scored were 2-point shots, only a few 1-point penalty shots were made, and the team made no 3-point shots that night. Estimate about how many 2-point shots the team could have made during the game.

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

2.) David Chapmen, the Pirates' best shooting guard, played amazingly in the basketball game last night. He made 17 3-point shots in one game. What were the total points David scored from his 3-point shots?

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

STOP

1.) The Bulldogs basketball team scored 103 points at Thursday night's game. Most of the points scored were 2-point shots, only a few 1-point penalty shots were made, and the team made no 3-point shots that night. Estimate about how many 2-point shots the team could have made during the game.

Step 1.) What is the question asking you to find? **the number of 2-point shots the team scored**	Step 2.) Which method will you use to solve? **division or multiplication with a missing factor**
Step 3.) How do you show your work? **$100 \div 2 = 50$** **or $p \times 2 = 100$** **$p = 50$**	Step 4.) Does your answer make sense? **$50 + 50 = 100$** **100 is close to 103**

2.) David Chapmen, the Pirates' best shooting guard, played amazingly in the basketball game last night. He made 17 3-point shots in one game. What were the total points David scored from his 3-point shots?

Step 1.) What is the question asking you to find? **total David scored from 3-point shots**	Step 2.) Which method will you use to solve? **multiplication** **17×3**
Step 3.) How do you show your work? **17×3** **↓** **$20 \times 3 = 60$** **$10 \times 3 + 7 \times 3$** **$30 + 21$** **51**	Step 4.) Does your answer make sense? **yes, close to my estimation** STOP

1.) The Wildcats football team scored 24 points at their last game. The team scored touchdowns worth 7 points and field goals worth 3 points each. What is the highest number of touchdowns the team could have made?

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

2.) The Mighty Mustangs scored 5 touchdowns at their last football game. Each touchdown earned the team 7 points. What was the total score for the Mustangs at the end of the game?

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

3.) For the baseball playoffs, 293 fans attended the first night, 302 fans attended the second night, 285 fans attended the third night, and 317 fans the fourth night. About how many fans attended the first 4 games during the playoffs?

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

4.) At the baseball playoff games 682 hotdogs were sold. If about the same number of hotdogs were sold at each of the 7 games, about how many hotdogs were sold per game?

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

Interview Questions

1.) What do you think the question is asking you to find?

2.) Which method did you use to solve? Why?

3.) What are the strategy steps you followed?

4.) How did you estimate to check that your answer was reasonable?

5.) Do you think you answered the original question? Explain why you think so.

1.) The Wildcats football team scored 24 points at their last game. The team scored touchdowns worth 7 points and field goals worth 3 points each. What is the highest number of touchdowns the team could have made?

Step 1.) What is the question asking you to find? **the number of touchdowns made in the game**	Step 2.) Which method will you use to solve? **division or multiplication with missing factor**
Step 3.) How do you show your work? **24 ÷ 7** **$n \times 7 = 24$** **$3 \times 7 = 21$** **$4 \times 7 = 28$** **$24 \div 7 \approx 3$**	Step 4.) Does your answer make sense? **3 touchdowns** **yes, it is possible in a game and $7 \times 3 = 21$**

2.) The Mighty Mustangs scored 5 touchdowns at their last football game. Each touchdown earned the team 7 points. What was the total score for the Mustangs at the end of the game?

Step 1.) What is the question asking you to find? **total score**	Step 2.) Which method will you use to solve? **multiplication** **5×7**
Step 3.) How do you show your work? **$5 \times 7 = 35$** **skip count by 5s**	Step 4.) Does your answer make sense? **yes, 35 points is reasonable**

3.) For the baseball playoffs, 293 fans attended the first night, 302 fans attended the second night, 285 fans attended the third night, and 317 fans the fourth night. About how many fans attended the first 4 games during the playoffs?

Step 1.) What is the question asking you to find? **how many fans attended the 4 games**	Step 2.) Which method will you use to solve? **estimate, addition, or multiplication**
Step 3.) How do you show your work? **295 ≈ 300** **300 × 4 = 1,200** **302 ≈ 300** **300 + 300 = 600** **285 ≈ 300** **300 + 300 = 600** **317 ≈ 300** **600 + 600 = 1,200**	Step 4.) Does your answer make sense? **yes, 4 groups of 300 is 1,200**

4.) At the baseball playoff games 682 hotdogs were sold. If about the same number of hotdogs were sold at each of the 7 games about how many hotdogs were sold per game?

Step 1.) What is the question asking you to find? **about how many hotdogs were sold**	Step 2.) Which method will you use to solve? **division** **682 ÷ 7**
Step 3.) How do you show your work? **682 ÷ 7** **630 ÷ 7 = 90** **700 ÷ 7 = 100** **682 ÷ 7 ≈ 100**	Step 4.) Does your answer make sense? **100 hotdogs** **yes 100 × 7 = 700** **700 is close to 682**

Interview Questions answers may vary

1.) What do you think the question is asking you to find?

2.) Which method did you use to solve? Why?

3.) What are the strategy steps you followed?

4.) How did you estimate to check that your answer was reasonable?

5.) Do you think you answered the original question? Explain why you think so.

1.) A marathon runner ran a 26-mile race. If she kept a pace of about 8 minutes for every mile, about how many minutes did it take her to finish the marathon?

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

2.) If a runner finished a marathon in 238 minutes, about how many hours was the runner running in the race? (Hint: remember 60 minutes = 1 hour)

Step 1.) What is the question asking you to find?	Step 2.) Which method will you use to solve?
Step 3.) How do you show your work?	Step 4.) Does your answer make sense?

1.) A marathon runner ran a 26-mile race. If she kept a pace of about 8 minutes for every mile, about how many minutes did it take her to finish the marathon?

Step 1.) What is the question asking you to find? **how many minutes to finish the marathon**	Step 2.) Which method will you use to solve? **multiplication** **26 × 8**
Step 3.) How do you show your work? **26 × 8** ↓ ↓ **30 × 8 = 240** **about 240 minutes**	Step 4.) Does your answer make sense? **yes, estimated to find about about how many minutes; 8 minutes 26 times is about 240 minutes.**

2.) If a runner finished a marathon in 238 minutes, about how many hours was the runner running in the race? (Hint: remember 60 minutes = 1 hour)

Step 1.) What is the question asking you to find? **how many hours in 238 minutes**	Step 2.) Which method will you use to solve? **division, 238 ÷ 60, and estimate**
Step 3.) How do you show your work? **238 ÷ 60** **60 × *n* = 238** **180 ÷ 60 = 3** **240 ÷ 60 = 4** **238 ÷ 60 ≈ 4 hours**	Step 4.) Does your answer make sense? **yes, 4 × 60 = 240** **238 is close to 240**