Are you ready to

Mission 4

Find the Area

Name:_____

Printed in the U.S.A.

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Fourth Edition

Name:____

Weekly Goal Tracker

Week of:	My goal is to earn badges for lessons: ____ ____ ____ ____	Teacher Signature:
Week of:	My goal is to earn badges for lessons: ____ ____ ____ ____	Teacher Signature:
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Name:____

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Week of:	My goal is to earn badges for lessons: _____ _____ _____ _____	Teacher Signature:
Week of:	My goal is to earn badges for lessons: _____ _____ _____ _____	Teacher Signature:
Week of:	My goal is to earn badges for lessons: _____ _____ _____ _____	Teacher Signature:
Week of:	My goal is to earn badges for lessons: _____ _____ _____ _____	Teacher Signature:
Week of:	My goal is to earn badges for lessons: _____ _____ _____ _____	Teacher Signature:

Name:_____

Mission 4: Workbook Checklist

1. Unit, Square Unit Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

2. Shape Shifter Date:_____ Teacher Signature:_____

Learning Lab: ○ **Exit Ticket**

3. Range of Rectangles Date:_____ Teacher Signature:_____

Learning Lab: ○ **Exit Ticket**

4. Opposites Are Equal Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

5. Tile It Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

6. Clever Calculations Date:_____ Teacher Signature:_____

Learning Lab: ○ **Exit Ticket**

7. Off the Grid Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

8. All You Need Are Side Lengths Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

9. Area Awareness Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

10. Piece It Together Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

11. All the Possibilities Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

12. A Space Odyssey Date:_____ Teacher Signature:_____

Z-Squad: ○ **Notes** ○ **Exit Ticket**

13. Cut It Out Date:_____ Teacher Signature:_____

Math Chat: ○ **Notes** ○ **Exit Ticket**

14. Cut and Compose Date:_____ Teacher Signature:_____

Z-Squad: ○ **Notes** ○ **Exit Ticket**

15. Area Architect Date:_____ Teacher Signature:_____

Learning Lab: ○ **Exit Ticket**

16. Area Remix Date:_____ Teacher Signature:_____

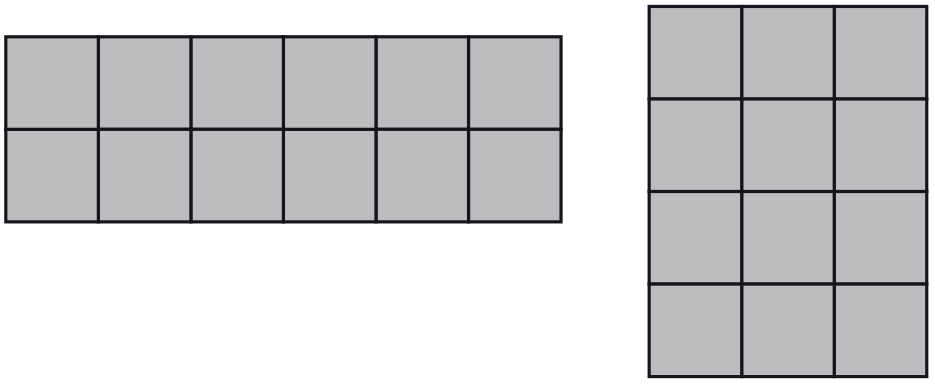
Learning Lab: ○ **Exit Ticket**

Lesson 1 G:3 M:4	Unit, Square Unit
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Look at the shapes below. Do both rectangles have the same area? Explain how you know.



EXPLANATION

_____

_____

_____

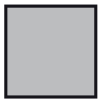
_____

EXTRA WORKSPACE

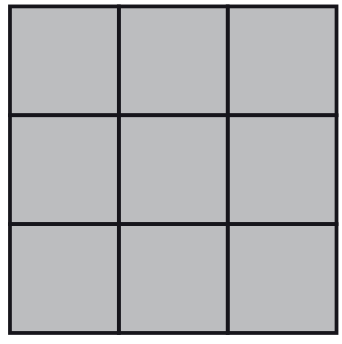
Lesson 1 G:3 M:4	EXIT TICKET

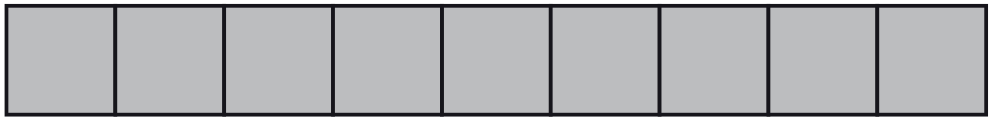
Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Each  is 1 square unit.

Do both rectangles have the same area? Explain how you know.





_____

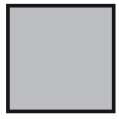
_____

_____

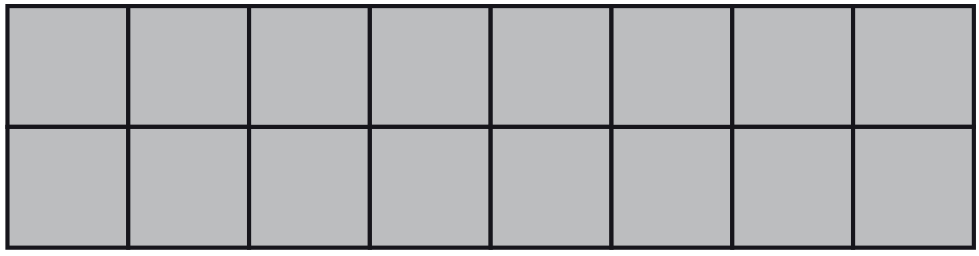
Lesson 2 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Each  is 1 square unit.

Find the area of the rectangle below. Then, draw a different rectangle with the same number of square units.



2. Zach creates a rectangle with an area of 6 square inches. Luke makes a rectangle with an area of 6 square centimeters.

Do the two rectangles have the same area? Why or why not?

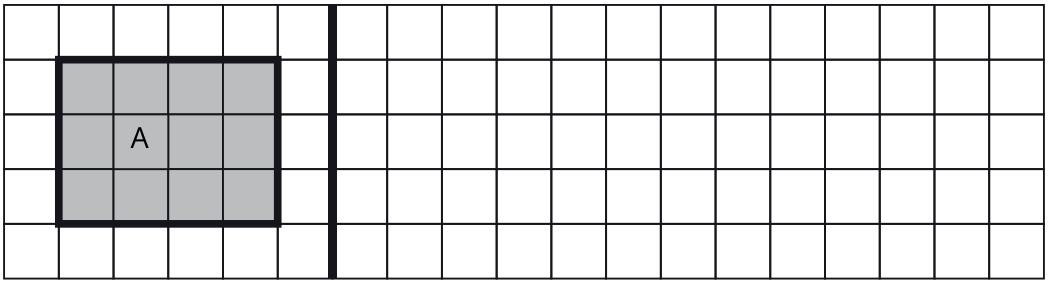
Lesson 3 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

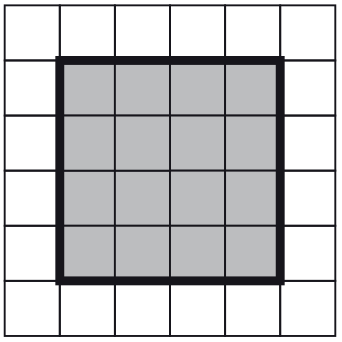
1. Each ☐ is 1 square unit. Write the area of Rectangle A.

   Then, draw a different rectangle with the same area in the space provided.



Area = _____

2. Each ☐ is 1 square unit. Does this rectangle have the same area as Rectangle A from Problem 1? Explain.



Lesson 4 G:3 M:4	Opposites Are Equal
	ZEARN STUDENT NOTES

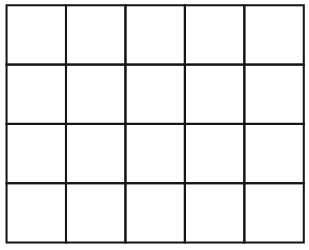
Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Find the area of the rectangle.

_____ length units

_____ length units



_____
_____
_____
_____

Area: _____ square units

EXTRA WORKSPACE

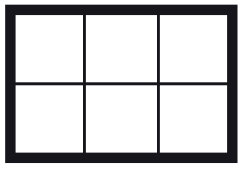
Lesson 4 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

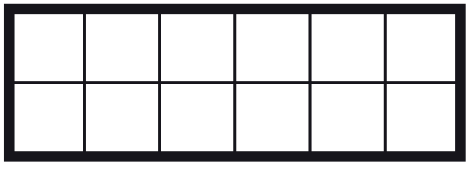
1. Label the side lengths of each rectangle. Then, match the rectangle to its total area.

a.



12 sq cm

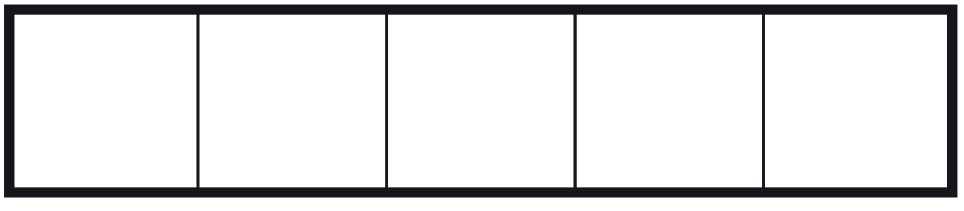
b.



5 sq in

6 sq cm

c.

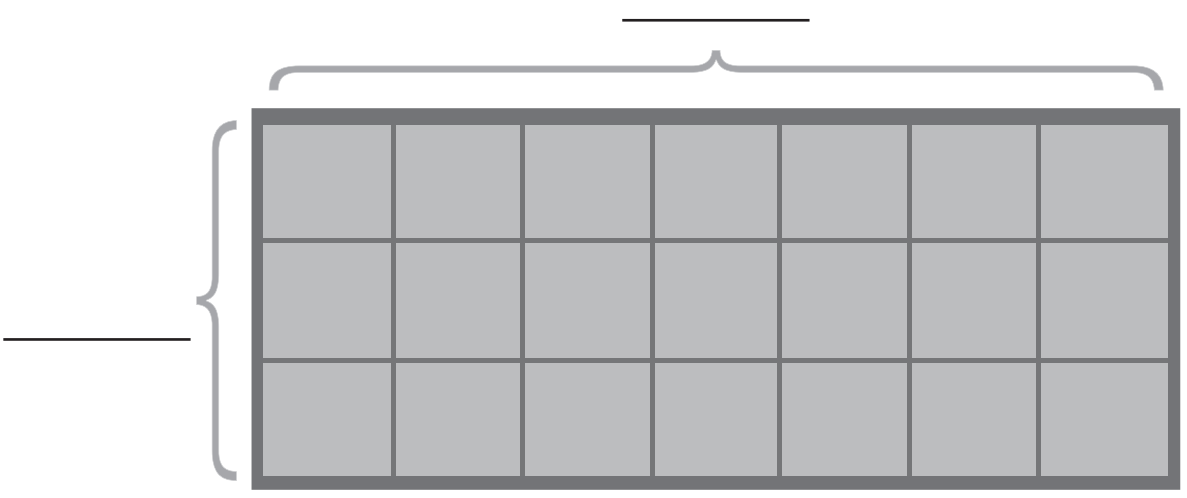


Lesson 5 G:3 M:4	Tile It
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Label the sides of the rectangle. Then, fill in the equation to find the area.



Area: _____ units × _____ units = _____ square units

EXTRA WORKSPACE

Lesson 5 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Darren has a total of 28 square centimeter tiles. He arranges them into 7 equal rows. Draw Darren's rectangle. Label the side lengths, and write a multiplication sentence to find the total area.

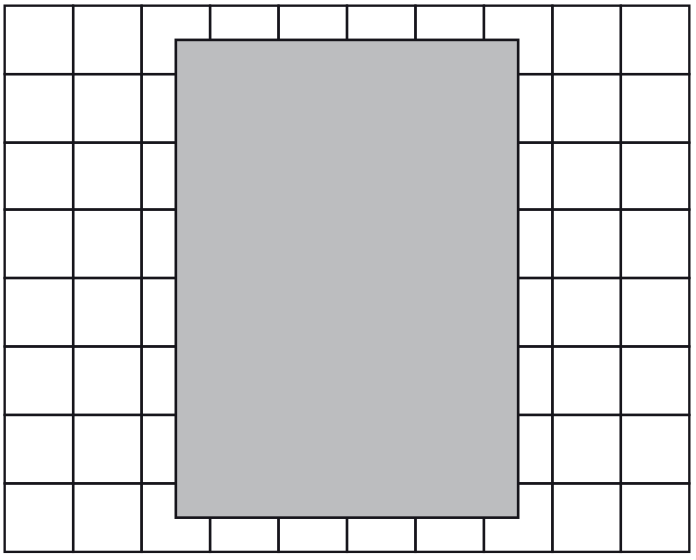
SHOW YOUR WORK

Lesson 6 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. The tiled floor in Cayden's dining room has a rug on it as shown below. How many square tiles are on the floor, including the tiles under the rug?

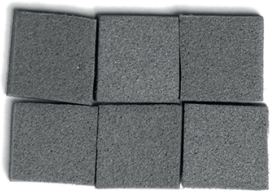


Lesson 7 G:3 M:4	Off the Grid
	ZEARN STUDENT NOTES

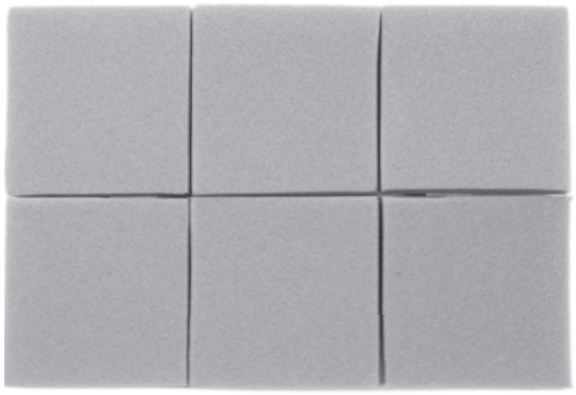
Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Label and compare the units.



Area = 6 square _____

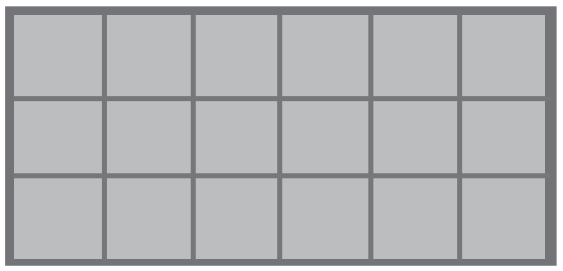


Area = 6 square _____

6 square centimeters is _____ _____ 6 square inches.

2 Label the sides and find the area of each rectangle.

_____ units

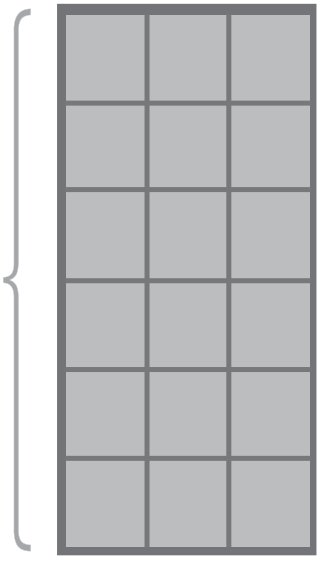


_____ units

A

Area = _____ square units

_____ units



_____ units

B

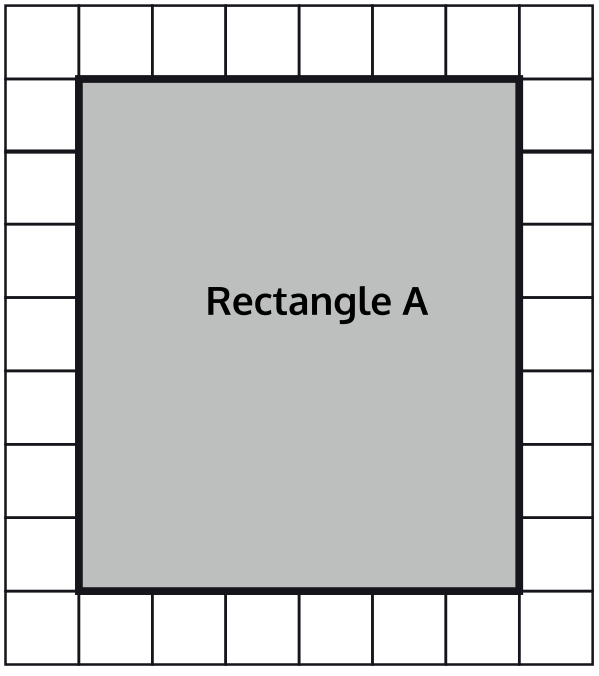
Area = _____ square units

Lesson 7 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Label the side lengths of Rectangle A on the grid below. Use a straight edge to draw a grid of equal size squares within Rectangle A. Find the total area of Rectangle A.



Area: _____ square units

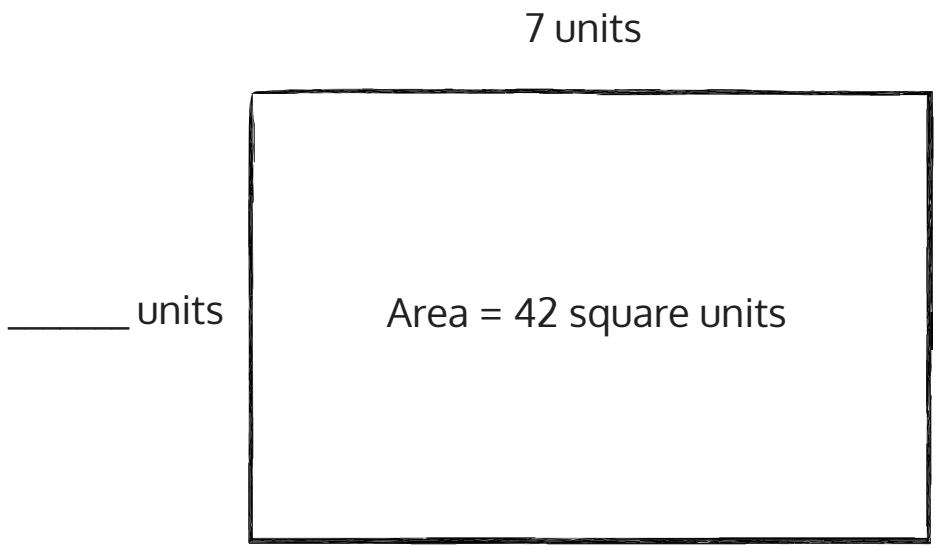
2. Mark makes a rectangle with 36 square centimeter tiles. Gia makes a rectangle with 36 square inch tiles. Whose rectangle has a bigger area? Explain your answer.

Lesson 8 G:3 M:4	All You Need Are Side Lengths
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Find the unknown side length.



EQUATIONS

_____ × _____ = _____

_____ ÷ _____ = _____

ANSWER SENTENCE

The unknown side length is _____.

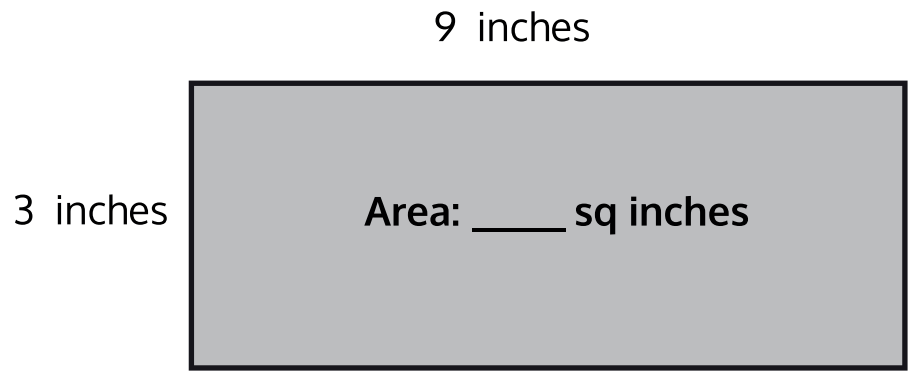
EXTRA WORKSPACE

Lesson 8 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

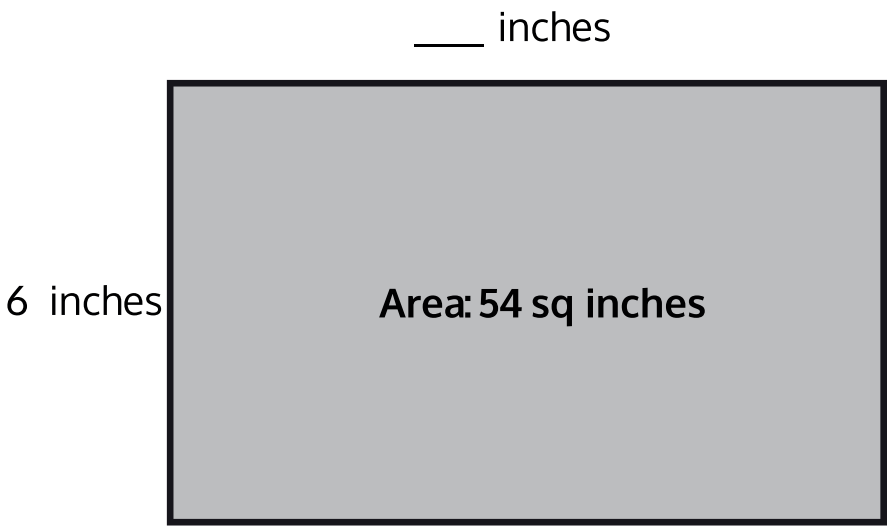
Complete: ☐ **Class:**_____

1. Write a multiplication equation to find the area of the rectangle below.



_____ × _____ = _____

2. Write a multiplication equation and a division equation to find the unknown side length for the rectangle below.



_____ × _____ = _____

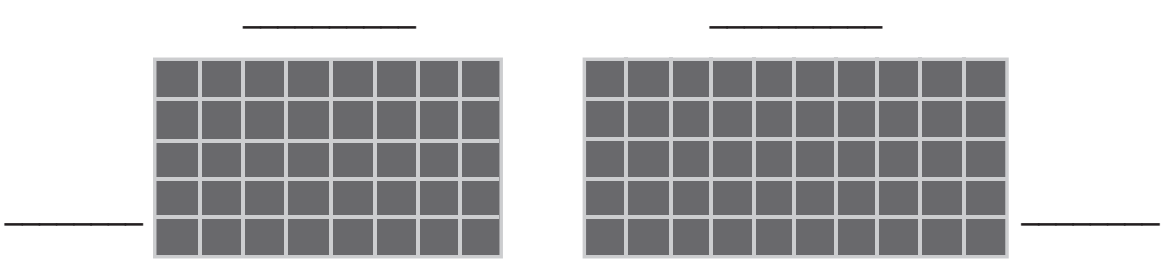
_____ ÷ _____ = _____

Lesson 9 G:3 M:4	Area Awareness
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Label the side lengths. Then find the area.



A = _____ × _____

= _____ sq. units

A = _____ × _____

= _____ sq. units

Write an equation to show the total area of the 2 rectangles.

_____ + _____ = _____ sq. units

2 Draw an area model to show the two rectangles from Problem 1 combined. Then, find the area.

DRAW

SOLVE

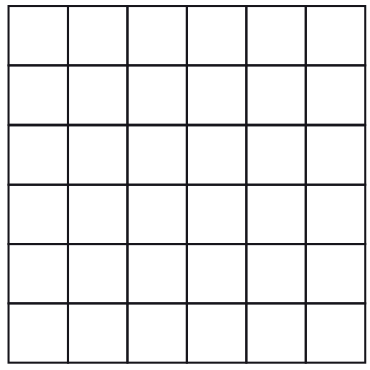
The total area is _____ square units

Lesson 9 G:3 M:4	EXIT TICKET

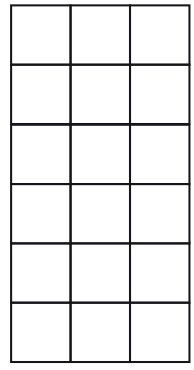
Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Lamar uses square tiles to make the 2 rectangles shown below.



Rectangle A



Rectangle B

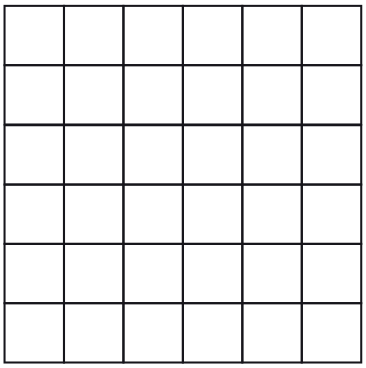
a. Label the side lengths of the 2 rectangles.

b. Write equations to find the areas of the rectangles.

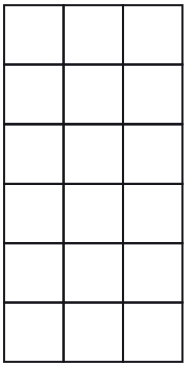
Area of Rectangle A: _____

Area of Rectangle B: _____

2. Lamar pushes Rectangle A next to Rectangle B to make a bigger rectangle. What is the area of the bigger rectangle? How do you know?



Rectangle A



Rectangle B

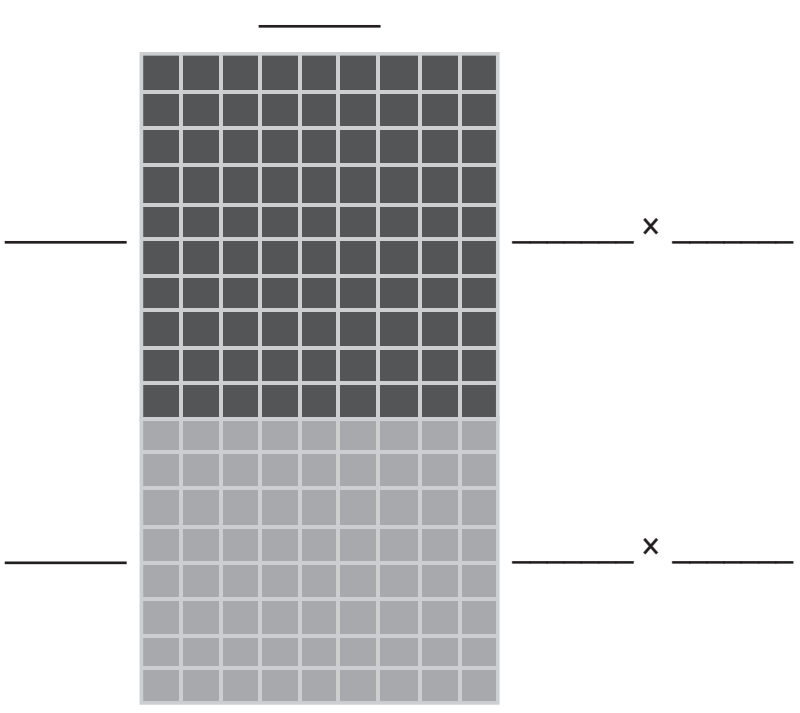
Lesson 10 G:3 M:4	Piece It Together
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Find the area of the shaded and unshaded rectangles.

Then, use the measurements of the small rectangles to find the area of the large rectangle.



18 × 9 = (_____ + 8) × 9

= (10 × 9) + (_____ × 9)

= _____ + _____

= _____sq units

EXTRA WORKSPACE

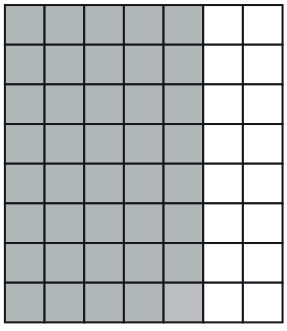
Lesson 10 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Label the side lengths of the shaded and unshaded rectangles. Then find the total area of the large rectangle by adding the areas of the 2 smaller rectangles.

a.



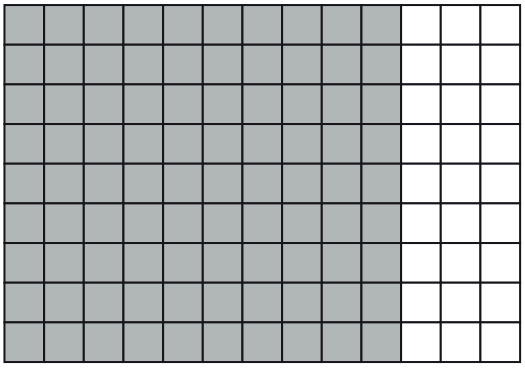
$8 \times 7 = 8 \times (\_\_\_\_\_ + \_\_\_\_\_)$

$= (8 \times \_\_\_\_\_) + (8 \times \_\_\_\_\_)$

$= \_\_\_\_\_ + \_\_\_\_\_$

Area: _____ square units

b.



$9 \times 13 = 9 \times (\_\_\_\_\_ + \_\_\_\_\_)$

$= (\_\_\_\_\_ \times \_\_\_\_\_) + (\_\_\_\_\_ \times \_\_\_\_\_)$

$= \_\_\_\_\_ + \_\_\_\_\_$

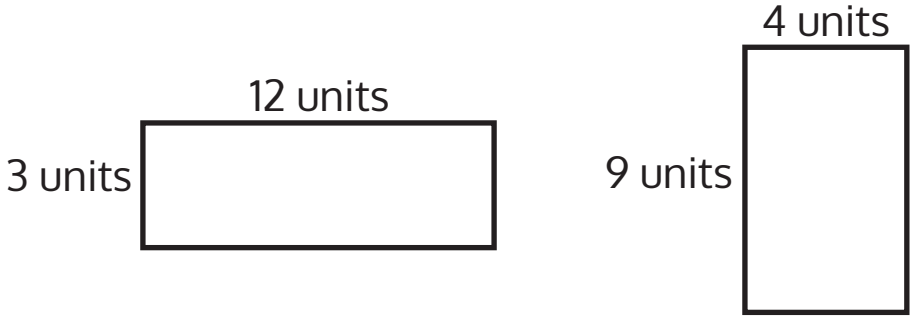
Area: _____ square units

Lesson 11 G:3 M:4	All the Possibilities
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Use the associative property to prove that a 3 × 12 rectangle has the same area as a 9 × 4 rectangle.



SHOW YOUR WORK

Area: $3 \times 12 = 3 \times (3 \times \_\_\_\_\_)$

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

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

$= \_\_\_\_\_$ sq units

$3 \times 12 = \_\_\_\_\_ = 9 \times 4$

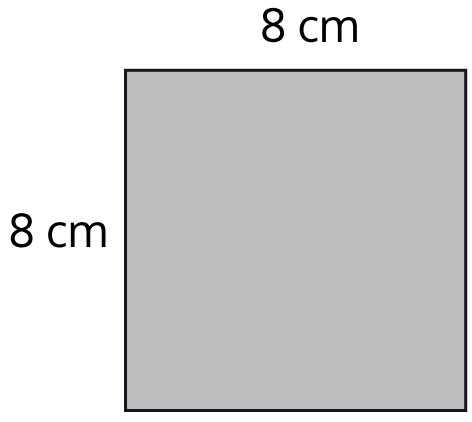
EXTRA WORKSPACE

Lesson 11 G:3 M:4	EXIT TICKET

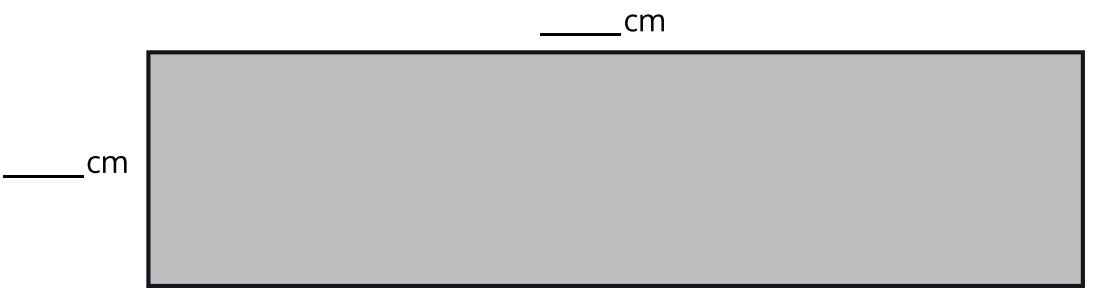
Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Find the area of the rectangle.



2. The rectangle below has the same area as the rectangle in Problem 1. Move the parentheses to find the unknown side lengths. Then, solve.



Area: $8 \times 8 = (4 \times 2) \times 8$

$= 4 \times 2 \times 8$

$=$ _____ $\times$ _____

$=$ _____

Area: _____ sq cm

Lesson 12 G:3 M:4	A Space Odyssey
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 The area of Theo's banner is 32 square feet.

If the length of the banner measures four feet, how wide is his banner?

DRAW

SOLVE

The width of Theo's banner is _____ feet.

2

Amir is getting carpet in his bedroom which measures 7 by 15 feet.

How many square feet of carpet will Amir need?

DRAW

SOLVE

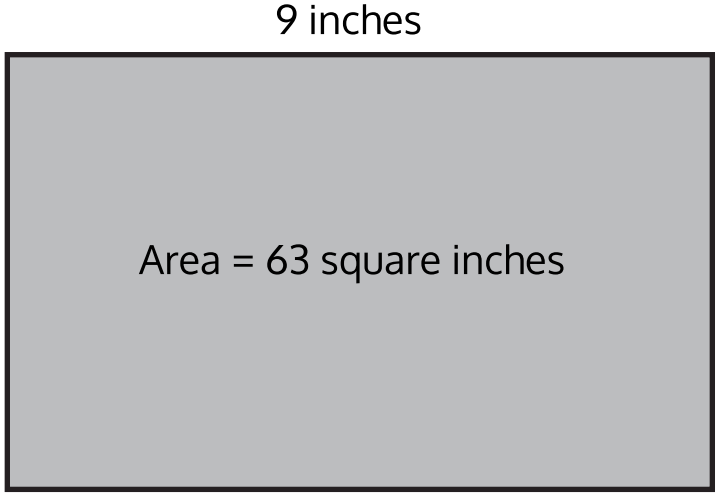
Amir will need _____ square feet of carpet.

Lesson 12 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. A painting has an area of 63 square inches. One side length is 9 inches. What is the other side length?



2. Judy's mini dollhouse has one floor and measures 4 inches by 16 inches. What is the total area of the dollhouse floor?

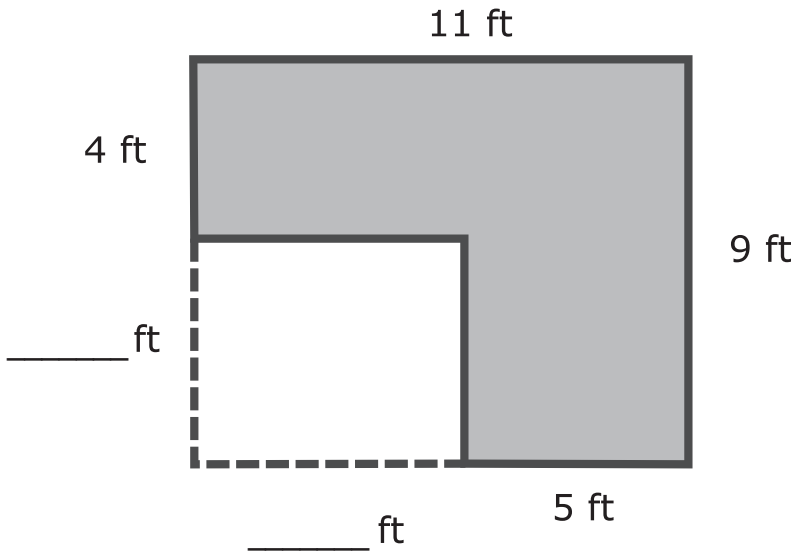
SHOW YOUR WORK

Lesson 13 G:3 M:4	Cut It Out
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1 Find the area of the shaded region.



SHOW YOUR WORK

a. Area of the big rectangle: _____ × _____ = _____ sq ft

b. Area of the small rectangle: _____ × _____ = _____ sq ft

c. Area of the shaded region: _____ − _____ = _____ sq ft

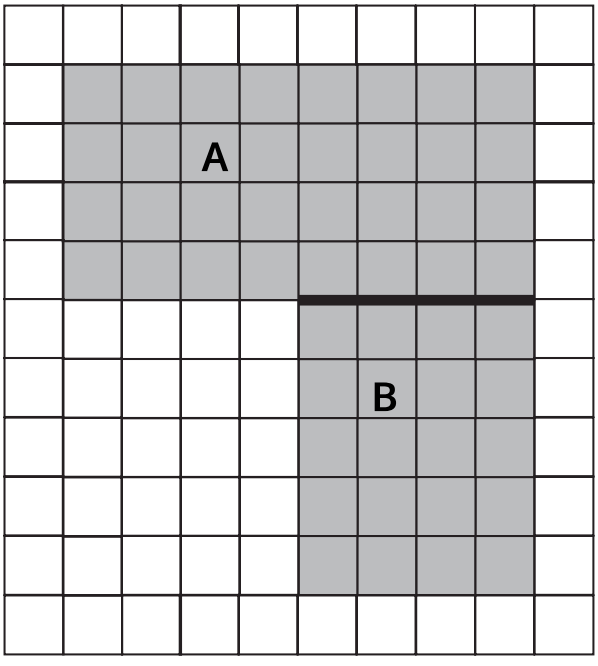
EXTRA WORKSPACE

Lesson 13 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. The following figure is made up of 2 rectangles. Find the total area of the figure.



Area of A + Area of B: ____ sq units + _____ sq units = _____ sq units

Lesson 14 G:3 M:4	Cut and Compose
	ZEARN STUDENT NOTES

Name:_____ **Date:**_____

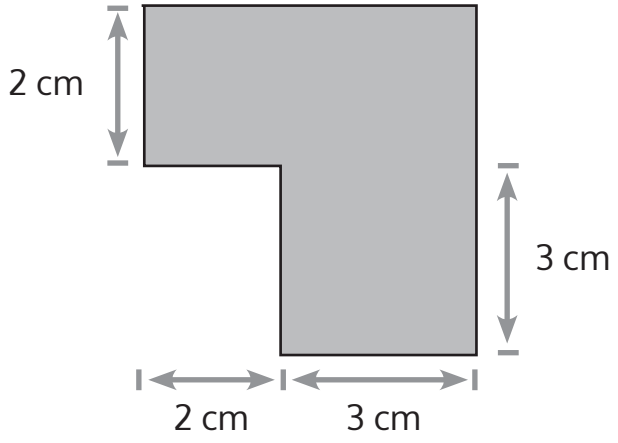
Complete: ☐ **Class:**_____

1 Fanny has a piece of fabric that is 8 feet long and 5 feet wide. She cuts out a rectangular piece that measures 3 feet by 2 feet.

How many square feet of fabric does Fanny have left?

DRAW	SOLVE
	There are _____ square feet of fabric left.

2 Find the area of the composite shape below.



SOLVE

The total area is _____ sq cm.

Lesson 14 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Mary draws an 8 cm by 6 cm rectangle on her grid paper. She shades a square with a side length of 4 cm inside her rectangle.

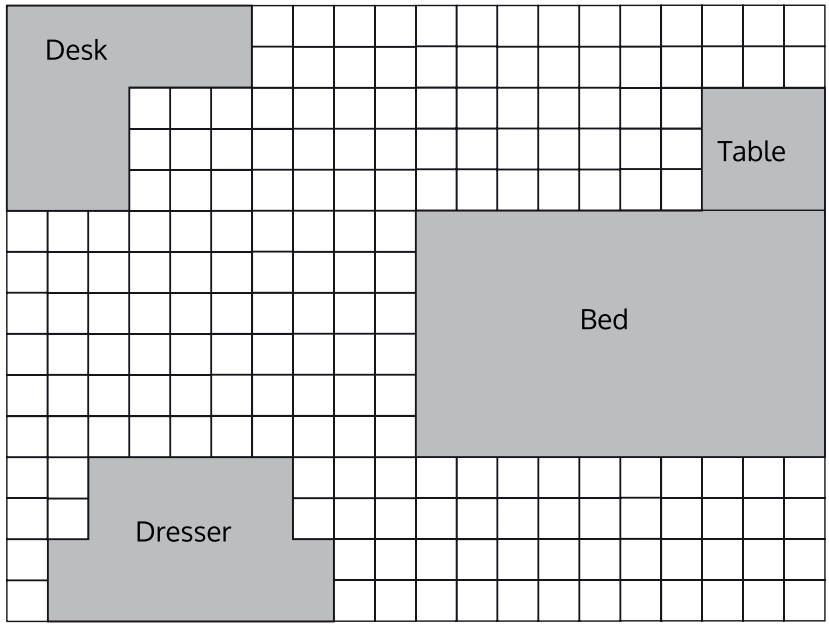
   What area of the rectangle is left unshaded?

Lesson 15 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Jack uses grid paper to create a floor plan of his room. Label the unknown measurements, and find the area of the items listed below.



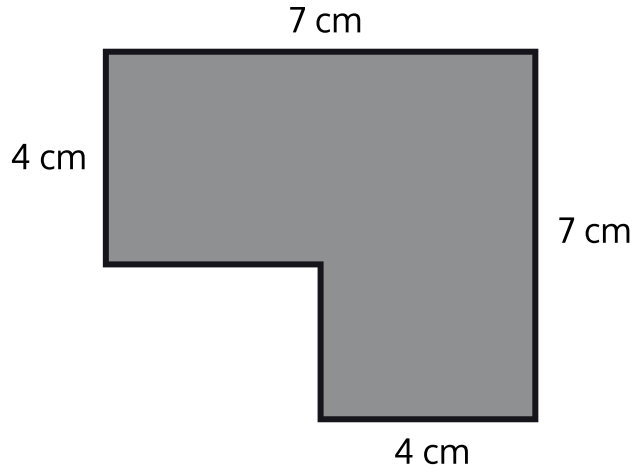
	Name	Equations	Total Area
a.	Jack's Room		_____ sq units
b.	Bed		_____ sq units
c.	Table		_____ sq units
d.	Dresser		_____ sq units
e.	Desk		_____ sq units

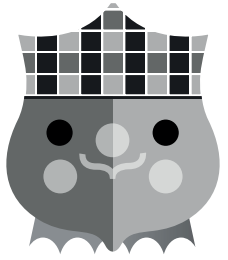
Lesson 16 G:3 M:4	EXIT TICKET

Name:_____ **Date:**_____

Complete: ☐ **Class:**_____

1. Find the area of the shaded figure. Then, draw and label a rectangle with the same area.





Congratulations!

You completed

Grade 3 Mission 4

Find the Area

Name

Date

Zearned it!