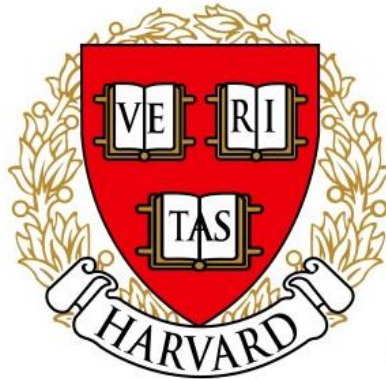Name_____

3rd Grade Modified Math Remote Learning Packet

Week 20

Dear Educator,

My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

_____   _____
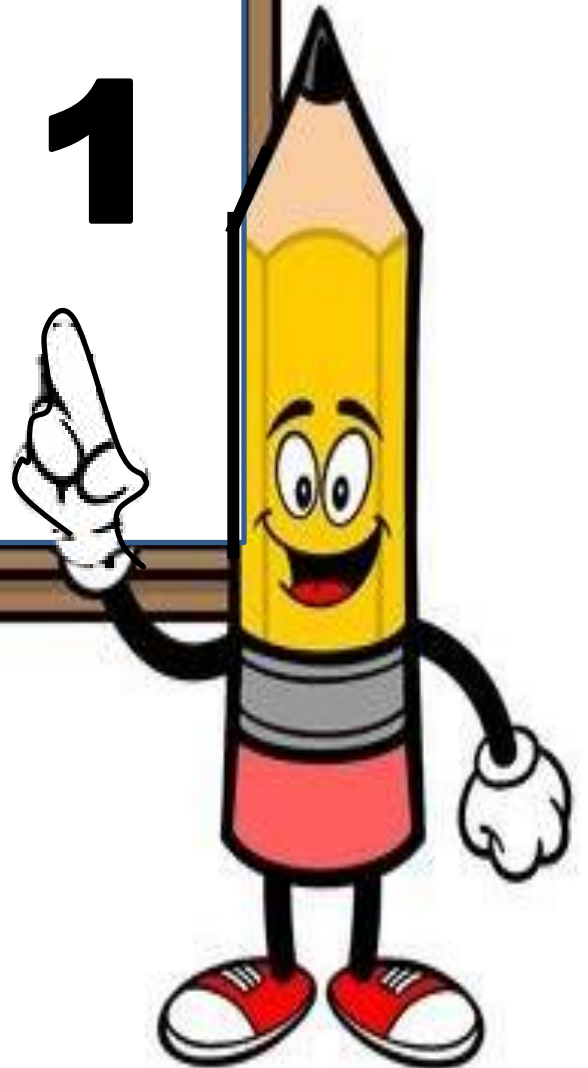(Parent Signature)   (Date)

Parents please note that all academic packets are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.
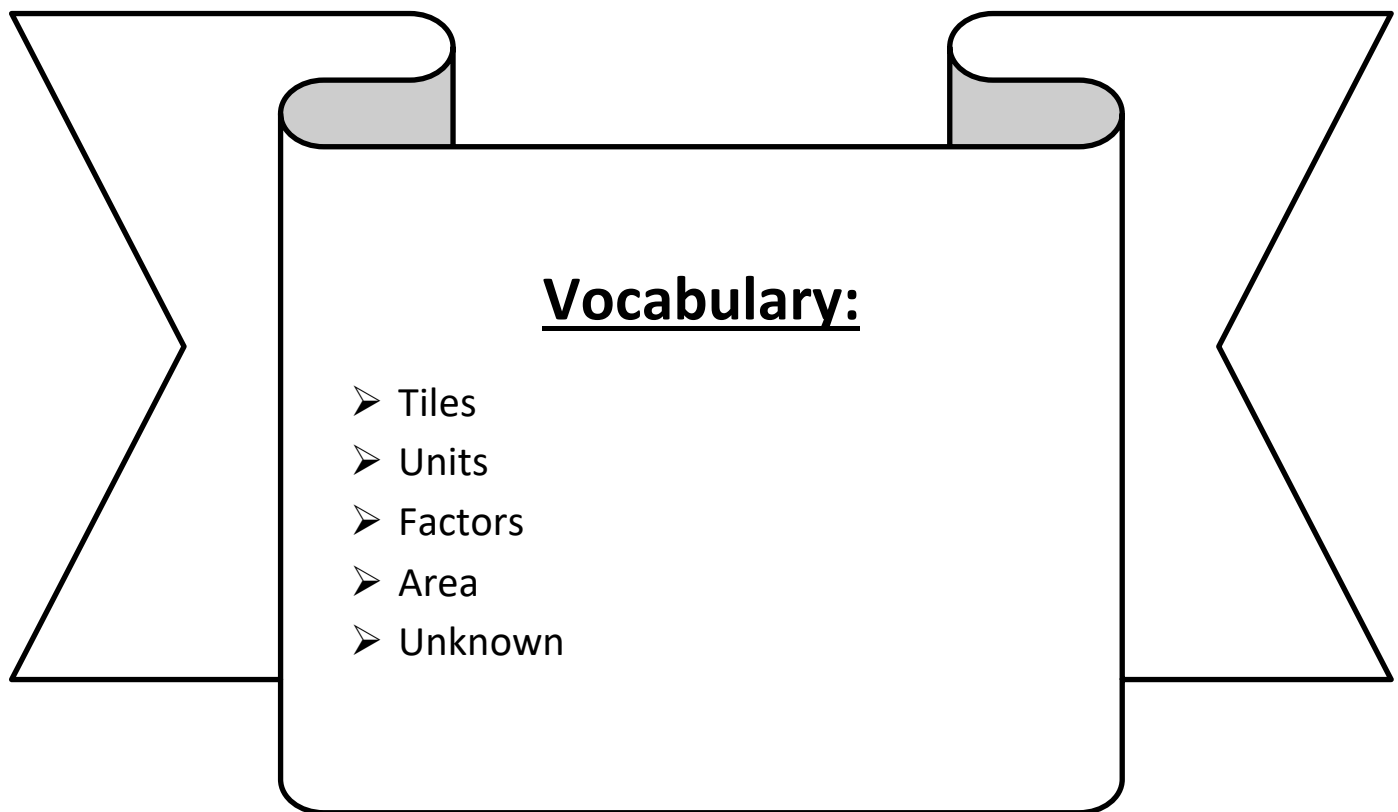
Brighter Choice
Charter School for Boys

Day # 1

LEQ: How can I form rectangles when given its area?

Objective: I can use the area's factors to form rectangle when given an area.

Vocabulary:

➢ Tiles
➢ Units
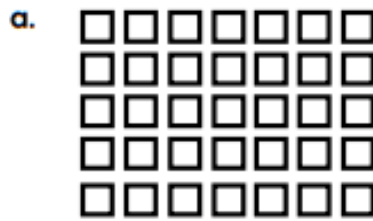➢ Factors
➢ Area
➢ Unknown

Do Now:

Multiplication Arrays

Write the multiplication fact shown by each array.

example

$2 \times 5 = 10$

a.

$5 \times 7 = 35$

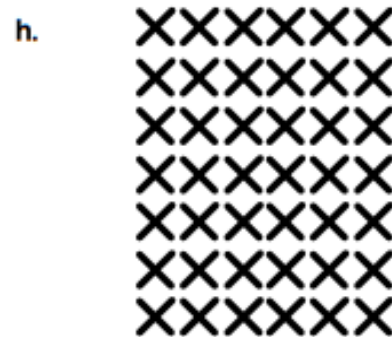b.

_____

c.

_____

d.

e.

$2 \times 4 = 8$

_____

f.

g.

h.

_____   _____   _____

i.

j.

k.

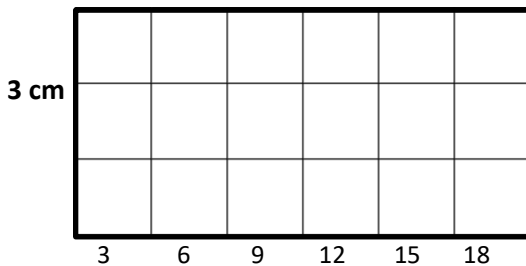_____   _____   _____

Input (My Turn):

When given a rectangle's area and one side length, we can _____ to find the other side length. For example, given a rectangle with an area of 12 square feet and a known side length of 3 feet, we can skip count by 3 to find the other side length: 3, _____, _____, _____. The side lengths are 3 feet and 4 feet.

1. Skip-count to find the unknown area. Write a multiplication sentence for each tiled rectangle.

Area: 18 square centimeters.

3 cm

3   6   9   12   15   18

_____**3**_____ × _____**6**_____ = _____**18**_____

Area: 24 square centimeters.

3 cm

_____**3**_____ × _____ = _____**24**_____

Name: _____ Week 20 Day 1 Date: _____

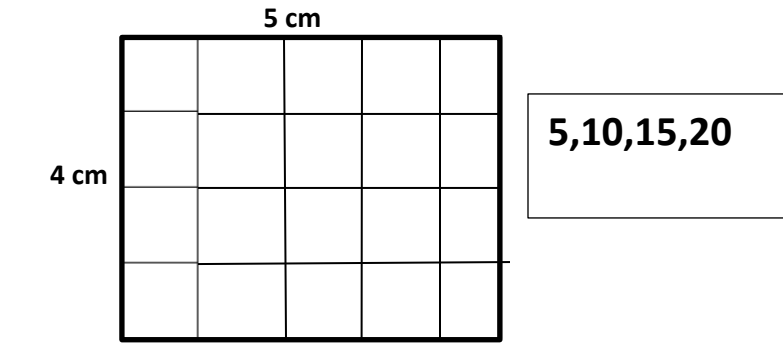BCCS-B   Harvard   Yale   Princeton

Problem Set (Your Turn):

1. Skip-count to find the unknown area. Write a multiplication sentence for each tiled rectangle.
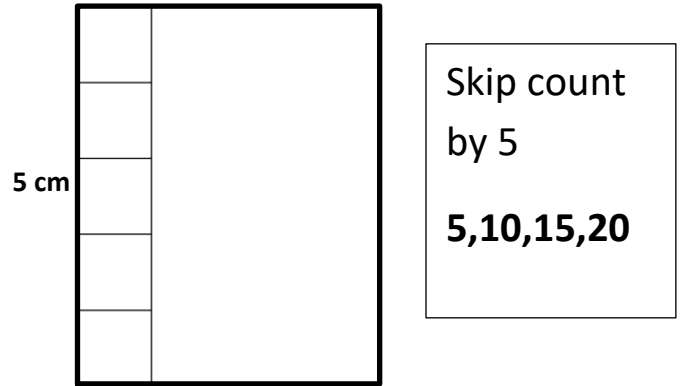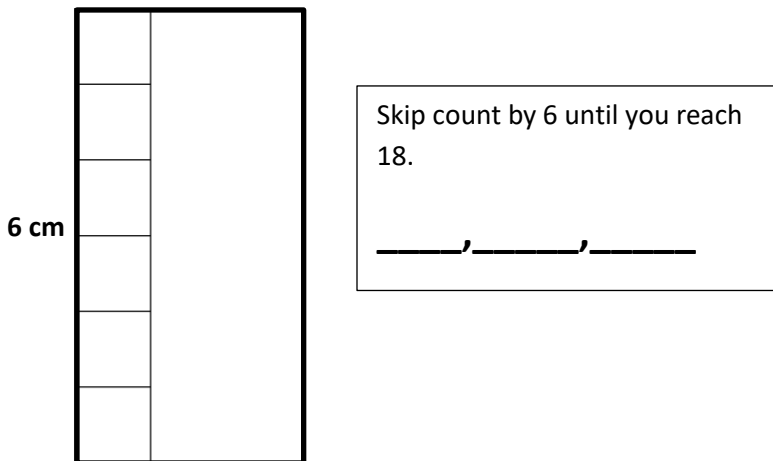
a. Area: _____ square centimeters.

5 cm

4 cm

| 5,10,15,20 |

5

4   **5**   **20**
_____ × _____ = _____

b. Area: 20 square centimeters.

5 cm

Skip count by 5

5,10,15,20

5   **20**
_____ × _____ = _____

c. Area: 18 square centimeters.

6 cm

Skip count by 6 until you reach 18.

_____,_____,_____

6   **18**
_____ × _____ = _____

d. Area: _____ square centimeters.

3 cm

3 cm

_____ × _____ = _____

6

Name: _____   Week 20 Day 1 Date: _____

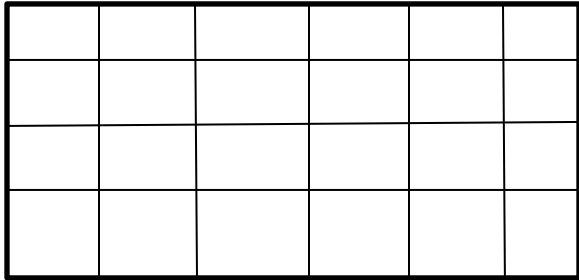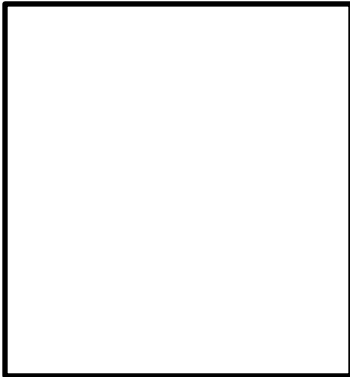BCCS-B   Harvard   Yale   Princeton

Input (My Turn):

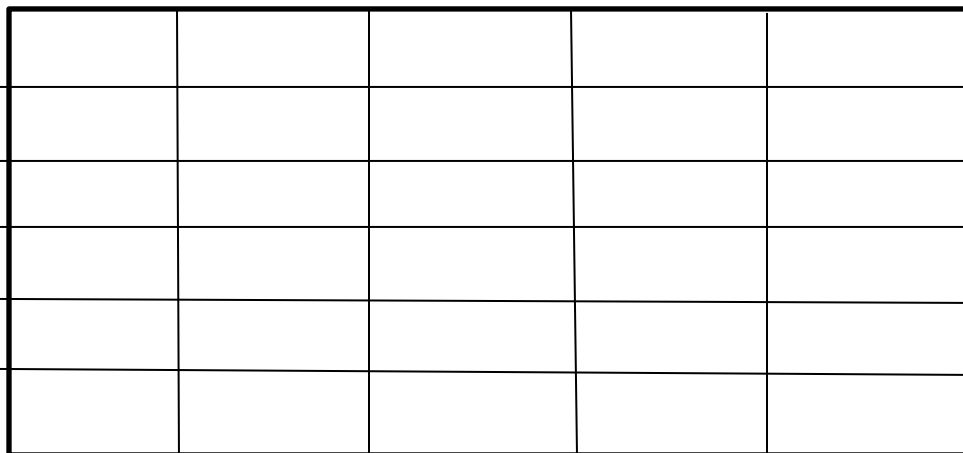When given a rectangle's area and no side lengths, we can use _____

pairs to determine possible side lengths. For example, given a rectangle with an area of 12

square feet and no known side lengths, possible factor pairs are:

3 feet x _____ feet, 2 feet x _____ feet, and 12 feet X _____foot.

1. Mr. Thompson has a total of 24 square inch tiles. **Draw two rectangles** that he might have made. **Then, write multiplication sentences for each.**

_____ x _____ = 24 square inches	⁶_____ x _ 4 _ = 24 square inches
4 x 6 = 24	

2. Xaiden makes a rectangle with 32 square centimeter tiles. Can Xaiden arrange all of his **32 square centimeter tiles into 6 equal rows?**   Use words, pictures, and numbers to support your answer.

6 x 5 = 30 if you add one more column it would be 6 x 6 and that = 36

Xaiden (can or cannot) create a rectangle with 32 square tiles. The rectangle above has 30 square tiles and if another column was added it would be 36.

Name: _____   Week 20 Day 1 Date: _____

BCCS-B   Harvard   Yale   Princeton

Problem Set (Your Turn):

1. Mr. Moore has a total of 30 square inch tiles. **Draw two rectangles** that he might have made. Then, write multiplication sentences for each.

_ 5 _ x _ 6 _ = 30 square inches	. 6 _ x 5 _ = 30 square inches

2. Saveon makes a rectangle with 42 square centimeter tiles. Can Saveon arrange all of his 42 square centimeter tiles into 8 equal rows? Use words, pictures, and numbers to support your answer.

_____

_____

_____

Application:

Lindsey makes a rectangle with 35 square inch tiles. She arranges the tiles in 5 equal rows. What are the side lengths of the rectangle? Use words, pictures, and numbers to support your answer.

Name: _____   Week 20 Day 1 Date: _____

BCCS-B   Harvard   Yale   Princeton
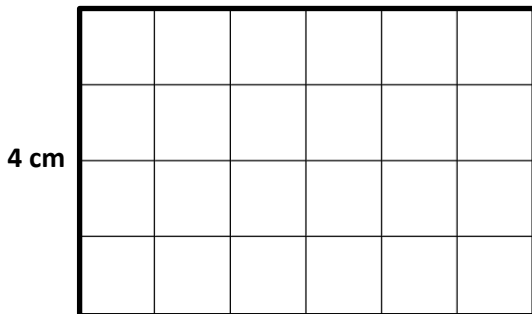
Exit Ticket:

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

28

_____ x _____ = _____
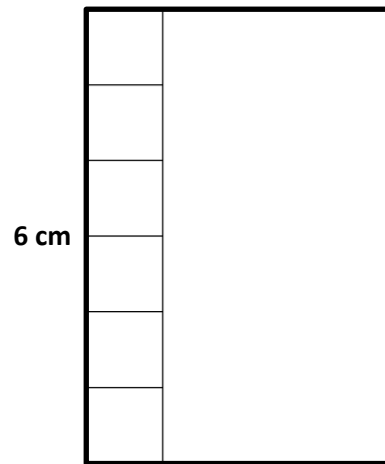
2. Skip-count to find the unknown area. Write a multiplication sentence for each tiled rectangle.

a.   Area: **24** square centimeters.

4 cm

___4___ × _____ = ___24___

b.   Area: **24** square centimeters.

6 cm

_____ × _____ = _____

Name: _____   Week 20 Day 1 Date: _____

BCCS-B   Harvard   Yale   Princeton
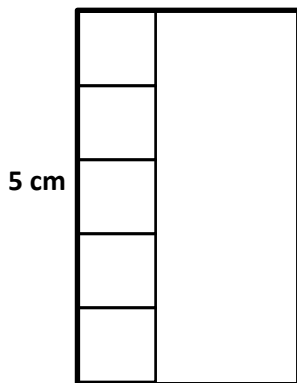
Homework:

1.   Donald makes a rectangle with 45 square inch tiles. He arranges the tiles in 5 equal rows. How many square inch tiles are in each row? Use words, pictures, and numbers to support your answer.

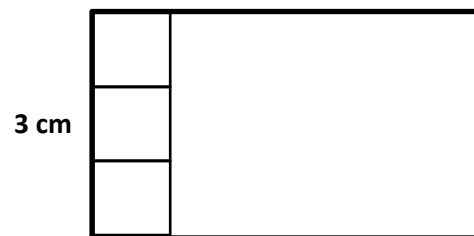Donald has _____ square inch tiles in each row.

_____

_____

_____

2.   Skip-count to find the unknown area. Write a multiplication sentence for each tiled rectangle.

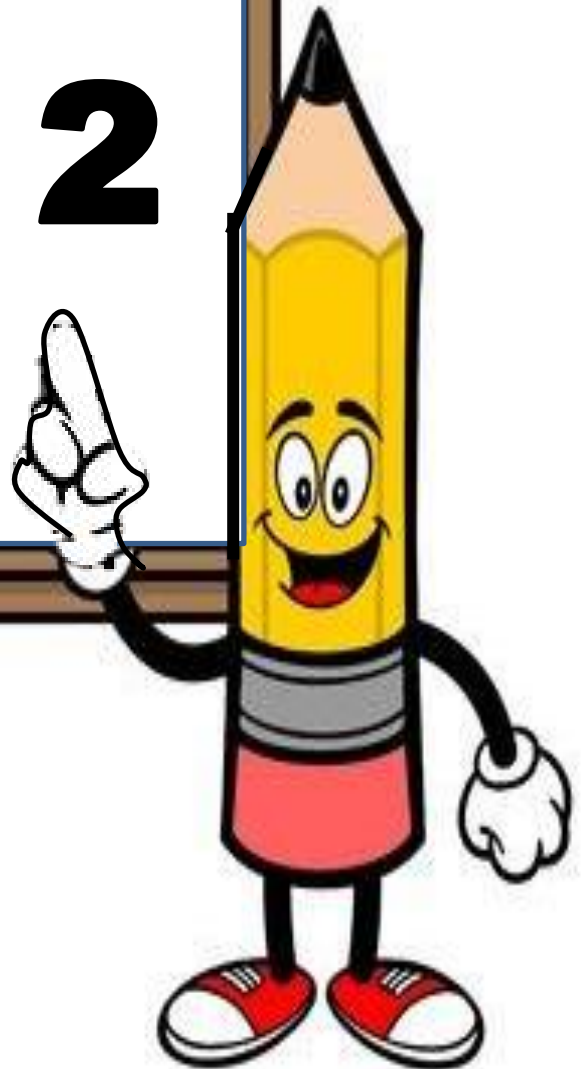a.   Area: **15** square centimeters.

5 cm

_____ × _____ = _____

b.   Area: **15** square centimeters.

3 cm
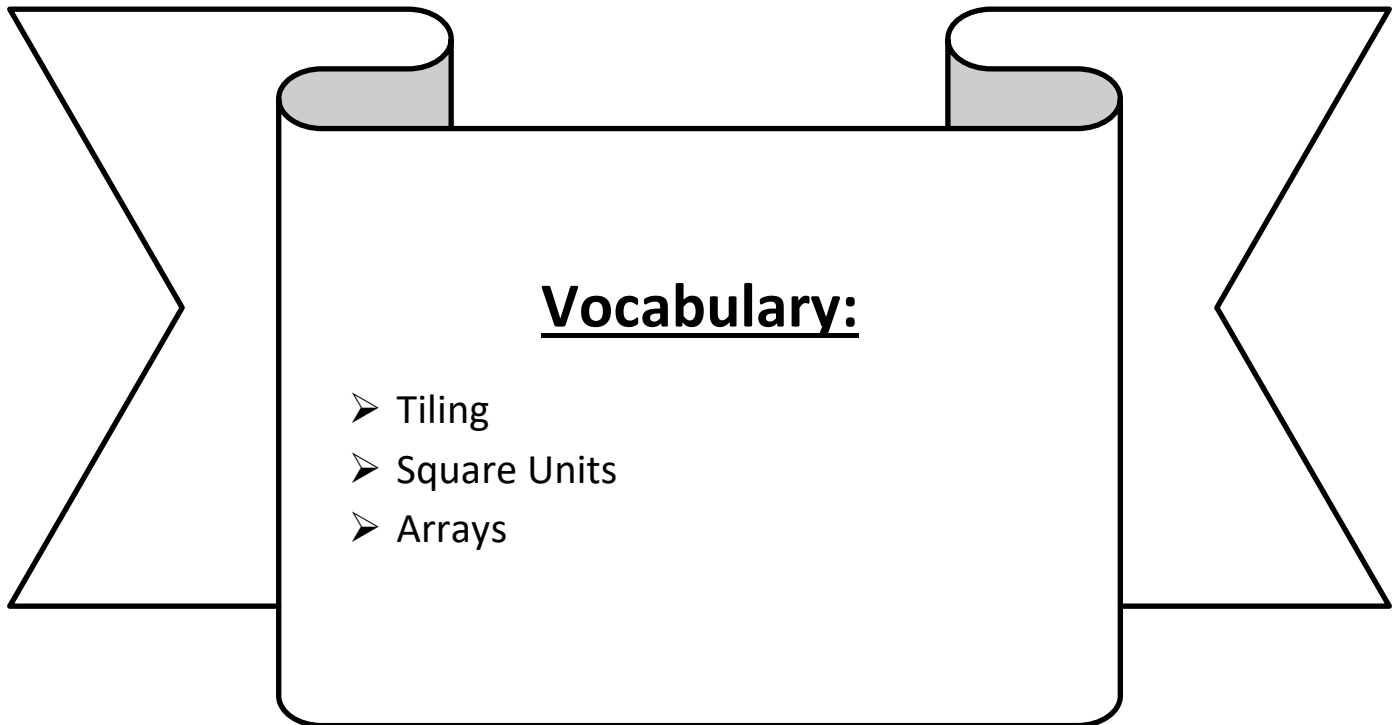
_____ × _____ = _____

12

Day # 2

LEQ: How can I find the area of an incomplete array?

Objective: I can draw rows and columns to find the array of an incomplete array.

Vocabulary:

- ➢ Tiling
- ➢ Square Units
- ➢ Arrays

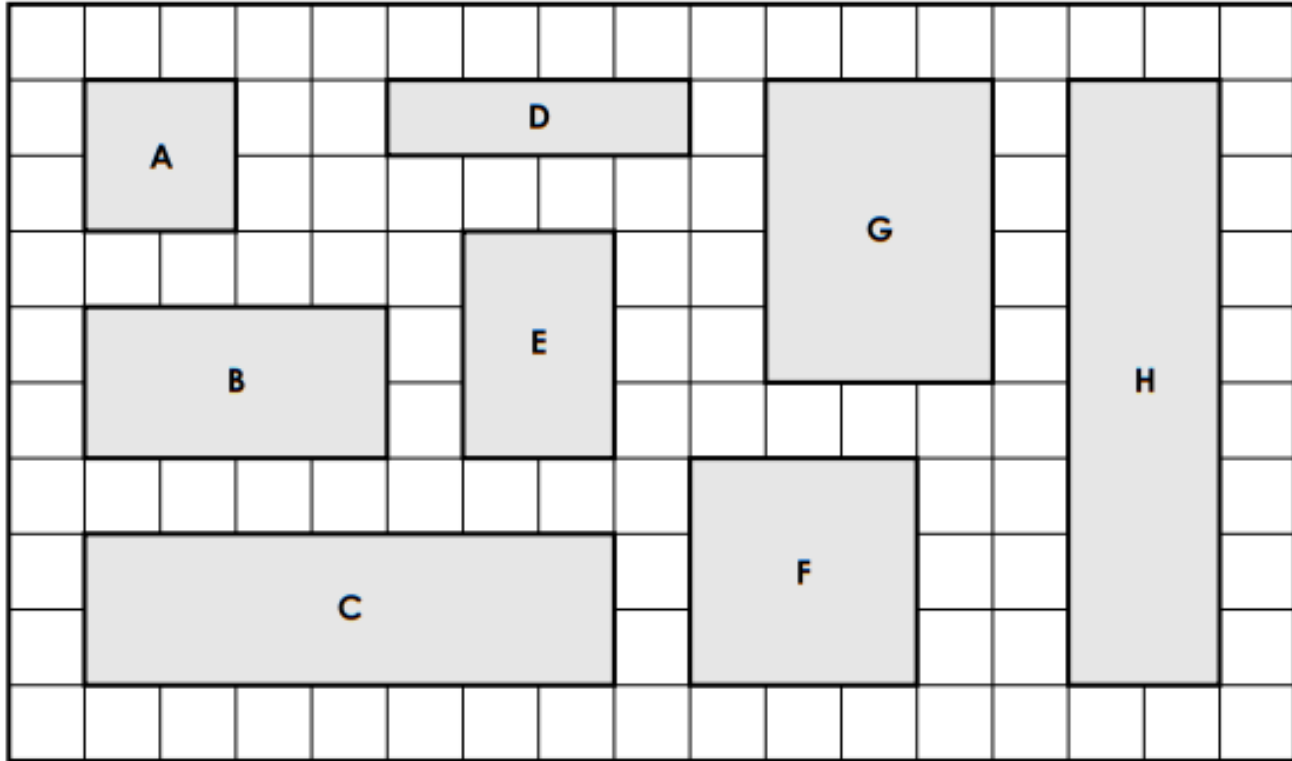BCCS-B   Harvard   Yale   Princeton

Do Now:

Area of a Rectangle

Write the area of each rectangle listed below. Don't forget to write *square units* in your answer. Not all rectangles will be used.

12 sq. Units

G -_____   A -_____   H -_____

B -_____   F -_____   E -_____

Which rectangle has the largest area? _____

Which two rectangles have the same area? _____ and _____

Input (My Turn):

Can we find the area of the arrays below?

Array 1   Array 2

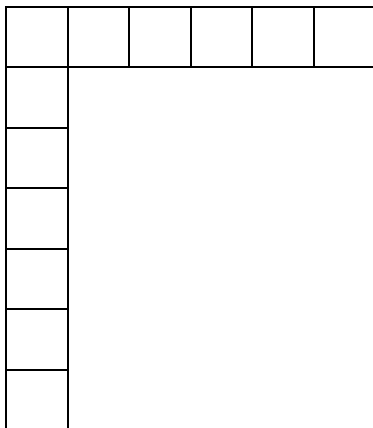| Extend the lines down to form the squares |
|---|

4   6   24
_____ cm × _____ cm = _____ sq cm   _____ cm × _____ cm = _____ sq cm

To find the area of a rectangular array, we must have a closed shape with 2 side lengths. We can find the area of incomplete arrays by drawing horizontal lines to create _____ and vertical lines to complete _____. Then we can use the equation ___ x ___ = ___ to find the area.

Problem Set (Your Turn):

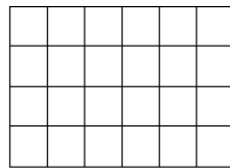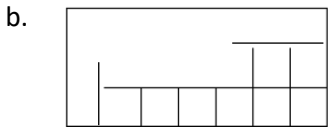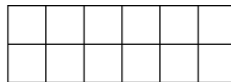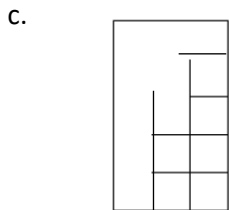1. Each ☐ represents 1 square centimeter. Draw to find the number of rows and columns in each array.
    Match it to its completed array. Then, fill in the blanks to make a true equation to find each array's area.
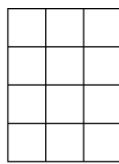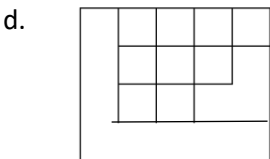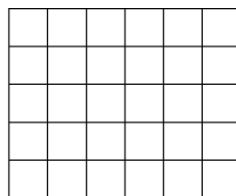
a.

$\underline{5}$ cm × $\underline{6}$ cm = $\underline{30}$ sq cm
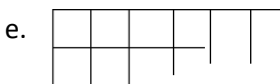
b.

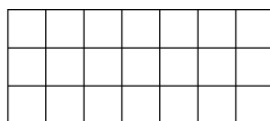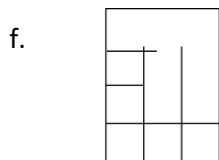_____ cm × _____ cm = _____ sq cm

c.

_____ cm × _____ cm = _____ sq cm

d.

_____ cm × _____ cm = _____ sq cm

e.

_____ cm × _____ cm = _____ sq cm

f.

_____ cm × _____ cm = _____ sq cm

Name: _____   Week 20 Day 2 Date: _____

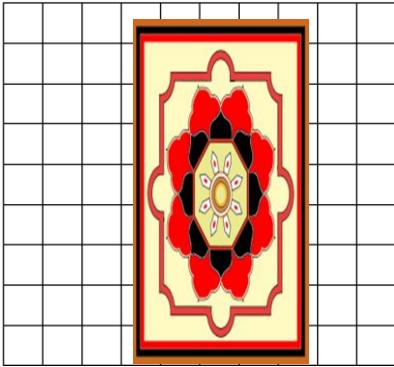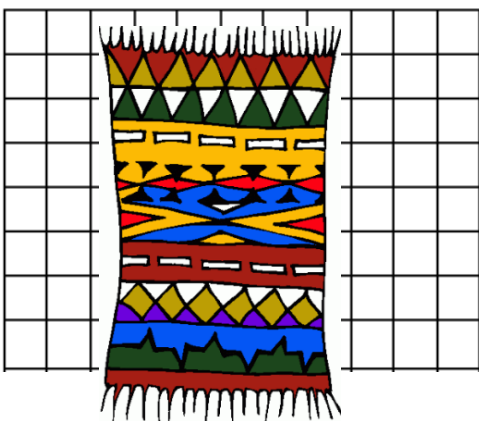BCCS-B   Harvard   Yale   Princeton

Input (My Turn):

2. The tile floor in Brandon's living room has a rug on it as shown below. How many square tiles are on the floor, including the tiles under the rug?

✅ Problem Set (Your Turn):

2. The tile floor in Britney's bedroom has a rug on it as shown below. How many square tiles are on the floor, including the tiles under the rug?

8 x 11= 88 square tiles

Name: _____ Week 20 Day 2 Date: _____

BCCS-B   Harvard   Yale   Princeton

Application:

Frank sees a book on top of his chessboard. How many squares are covered by the book? Explain your answer.

How can you accomplish this task? We are looking for the amount of squares covered by the book.

Name: _____ Week 20 Day 2 Date: _____
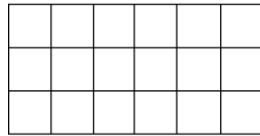
BCCS-B   Harvard   Yale   Princeton

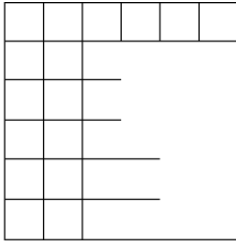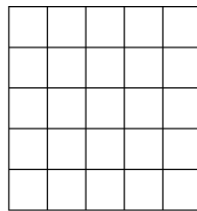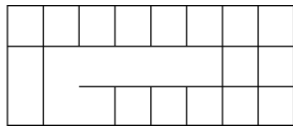## Exit Ticket: (Choose 3 problems to complete)

1. Draw to find the number of rows and columns in each array. Match it to its completed array. Then, fill in the blanks to make a true equation to find each array's area.

a.

_____ cm × _____ cm = _____ sq cm

b.

_____ cm × _____ cm = _____ sq cm

c.

_____ cm × _____ cm = _____ sq cm

_____ cm × _____ cm = _____ sq cm

d.

e.

_____ cm × _____ cm = _____ sq cm

Homework:

1. The tub in Paige's bathroom covers the tile floor as shown below. <u>How many square tiles are on the floor, including the tiles under the tub?</u>

1 2 3 4 5 6 7 8 9 10

9 x 10 =

9,18,27,36,45,54,63,72,81,90

2. 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?

Day # 3

LEQ: How can I interpret area models to form rectangular arrays?

Objective: I can form units within rectangles and interpret their area using arrays.

Vocabulary:

- ➢ Array Model
- ➢ Area Model
- ➢ Side Lengths
- ➢ Grid

Do Now:

Area of a Rectangle

Find the area of each rectangle.

1)

7 in

5 in

$5 \times 7 = 35$ in

Area = 35 in

2)

3 ft

6 ft

Area =

3)

8 yd

4 yd

Area =

4)

9 ft

6 ft

Area =

5)

3 yd

10 yd

Area =

6)

5 in

9 in

Area =

7)

4 yd

5 yd

Area =

8)

12 in

10 in

Area =

9)

7 ft

15 ft

Area =

24

Input (My Turn): Complete B, C, D

1. Draw a grid of equal size squares within the rectangle. Find and label the side lengths. Then, multiply the side lengths to find the area.

a.   Area A:

$$\underset{4}{\underline{\quad}} \text{ units} \times \underset{3}{\underline{\quad}} \text{ units} = \underset{12}{\underline{\quad}} \text{ square units}$$

b.   Area B:

_____ units × _____ units = _____ square units

c.   Area C:

_____ units × _____ units = _____ square units

d.   Area D:

_____ units × _____ units = _____ square units

e.   Area E:

_____ unit × _____ units = _____ square units

f.   Area F:

_____ units × _____ units = _____ square units

Name: _____   Week 20 Day 3 Date: _____

BCCS-B   Harvard   Yale   Princeton

Problem Set (Your Turn): Complete B,C,D

1. Draw a grid of equal size squares within the rectangle. Find and label the side lengths.
Then, multiply the side lengths to find the area.

a.   Area A:

5
____ units ✕ __2__ units = __10__ square units

b.   Area B:

____ units ✕ ____ units = ____ square units

c.   Area C:

____ units ✕ ____ units = ____ square units

d.   Area D:

____ units ✕ ____ units = ____ square units

e.   Area E:

____ unit ✕ ____ units = ____ square units

f.   Area F:

____ units ✕ ____ units = ____ square units

Name: _____   Week 20 Day 3 Date: _____

BCCS-B   Harvard   Yale   Princeton

Rectangular Arrays	Area Models
a. _6_ square units	3 units ⎕ 3 units × ___ units (2) = ___ square units (6) 2 units
b. _____ square units	_____ units × _____ units = _____ square units
c. _____ square units	_____ units × _____ units = _____ square units
d. _____ square units	_____ units × _____ units = _____ square units

Input (My Turn):

Problem Set (Your Turn):

a.

_____ square units

3 units

3 units × _____ units

= _____ square units

4 units

b.

_____ square units

_____ units × _____ units = _____ square units

c.

_____ square units

_____ units × _____ units = _____ square units

d.

_____ square units

_____ units × _____ units

= _____ square units

C Circle key numbers & units
   What do I know?

U Underline the question
   What am I being asked to solve?

B Box math clue words
   Am I going to +, -, x, or ÷ ?

E Evaluate and Eliminate
   What steps do I take?
   What information don't I need?

S Solve and Show your work
   Does my answer make sense?
   How can I double check?

✓ Who/what is this problem about?

✓ How do we solve this problem?

✓ Show and check your work completely.

Application:

Lori wants to replace the square tiles on her wall. The square tiles are sold in boxes of 8 square tiles. Lori buys 6 boxes of tiles. Does she have enough to replace all of the tiles, including the tiles under the painting? Explain your answer.

5

Painting

8

6 x 8 = 48 square tiles

5 x 8 = ?

_____

Exit Ticket:

1. Label the side lengths of Rectangle A on the grid below. Draw a grid of equal size squares within Rectangle A. Find the total area of Rectangle A.

Rectangle A

Area: _____ square units

Homework:

1. Mrs. Howards's art class needs to create a stage design that covers exactly 60 square feet. Mrs. Howard marks the area for the mural as shown on the grid. Each ☐ represents 1 square foot. Did she mark the area correctly? Explain your answer.

2. Mrs. Blomgren draws a rectangular array. Zaymir skip-counts by threes and Gionni skip-counts by fives to find the total number of square units in the array. When they give their answers, Mrs. Blomgren says that they are both right. Use pictures, numbers, and words to explain how Zaymir and Gionni can both be right.

Zaymir	Gionni

Day # 4

LEQ: How can I find the area of a rectangle without a grid?

Objective: I can use side lengths to find the area of a rectangle without a grid.

Vocabulary:

- ➢ Grid
- ➢ Side Lengths
- ➢ Factors
- ➢ Area
- ➢ Product

Do Now:

Multiplication: 0 - 6

a.
$$\begin{array}{r} 6 \\ \times\ 3 \\ \hline 18 \end{array}\qquad \begin{array}{r} 2 \\ \times\ 9 \\ \hline 18 \end{array}\qquad \begin{array}{r} 1 \\ \times\ 12 \\ \hline \end{array}\qquad \begin{array}{r} 3 \\ \times\ 7 \\ \hline \end{array}$$

b.
$$\begin{array}{r} 4 \\ \times\ 7 \\ \hline \end{array}\quad \begin{array}{r} 5 \\ \times\ 8 \\ \hline \end{array}\quad \begin{array}{r} 6 \\ \times\ 12 \\ \hline \end{array}\quad \begin{array}{r} 3 \\ \times\ 9 \\ \hline \end{array}\quad \begin{array}{r} 2 \\ \times\ 5 \\ \hline \end{array}\quad \begin{array}{r} 0 \\ \times\ 1 \\ \hline \end{array}\quad \begin{array}{r} 6 \\ \times\ 4 \\ \hline \end{array}$$

c.
$$\begin{array}{r} 2 \\ \times\ 12 \\ \hline \end{array}\quad \begin{array}{r} 6 \\ \times\ 7 \\ \hline \end{array}\quad \begin{array}{r} 3 \\ \times\ 5 \\ \hline \end{array}\quad \begin{array}{r} 4 \\ \times\ 3 \\ \hline \end{array}\quad \begin{array}{r} 3 \\ \times\ 11 \\ \hline \end{array}\quad \begin{array}{r} 6 \\ \times\ 10 \\ \hline \end{array}\quad \begin{array}{r} 5 \\ \times\ 9 \\ \hline \end{array}$$

d.
$$\begin{array}{r} 3 \\ \times\ 8 \\ \hline \end{array}\quad \begin{array}{r} 1 \\ \times\ 5 \\ \hline \end{array}\quad \begin{array}{r} 5 \\ \times\ 4 \\ \hline \end{array}\quad \begin{array}{r} 6 \\ \times\ 6 \\ \hline \end{array}\quad \begin{array}{r} 4 \\ \times\ 0 \\ \hline \end{array}\quad \begin{array}{r} 2 \\ \times\ 4 \\ \hline \end{array}\quad \begin{array}{r} 3 \\ \times\ 8 \\ \hline \end{array}$$

e.
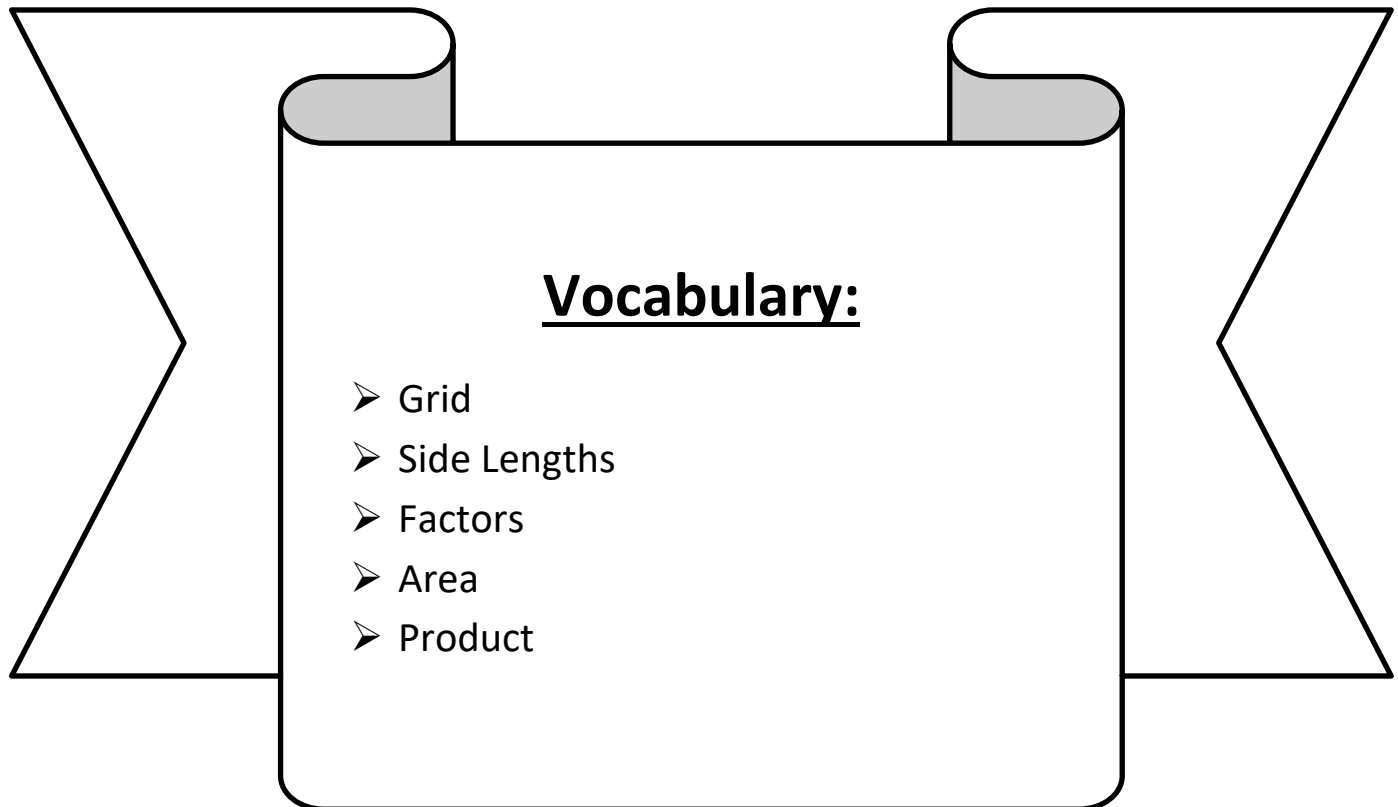$$\begin{array}{r} 3 \\ \times\ 12 \\ \hline \end{array}\quad \begin{array}{r} 5 \\ \times\ 7 \\ \hline \end{array}\quad \begin{array}{r} 2 \\ \times\ 6 \\ \hline \end{array}\quad \begin{array}{r} 6 \\ \times\ 11 \\ \hline \end{array}\quad \begin{array}{r} 4 \\ \times\ 4 \\ \hline \end{array}\quad \begin{array}{r} 0 \\ \times\ 7 \\ \hline \end{array}\quad \begin{array}{r} 2 \\ \times\ 7 \\ \hline \end{array}$$

f.
$$\begin{array}{r} 6 \\ \times\ 5 \\ \hline \end{array}\qquad\qquad\qquad\qquad \begin{array}{r} 6 \\ \times\ 8 \\ \hline \end{array}\quad \begin{array}{r} 5 \\ \times\ 12 \\ \hline \end{array}\quad \begin{array}{r} 6 \\ \times\ 9 \\ \hline \end{array}$$

g.
$$\begin{array}{r} 4 \\ \times\ 9 \\ \hline \end{array}\qquad\qquad\qquad\qquad \begin{array}{r} 5 \\ \times\ 0 \\ \hline \end{array}\quad \begin{array}{r} 4 \\ \times\ 8 \\ \hline \end{array}\quad \begin{array}{r} 2 \\ \times\ 6 \\ \hline \end{array}$$

34

Input (My Turn):

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

7 inches

4 inches | **Area: _____ sq in**

6 inches

3 inches | **Area: _____ sq in**

_____ ✕ _____ = _____   _____ ✕ _____ = _____

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

_____ inches

7 inches | **Area: 63 sq in**

_____ inches

6 inches | **Area: 48 sq in**

_____ ✕ _____ = _____   _____ ✕ _____ = _____

_____ ÷ _____ = _____   _____ ÷ _____ = _____

35

Name: _____   Week 20 Day 4 Date: _____
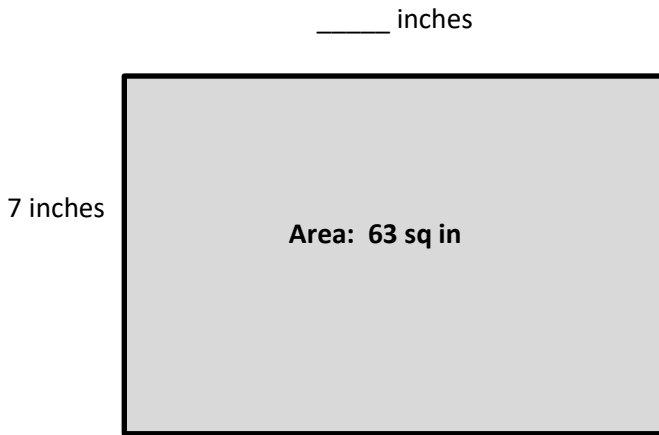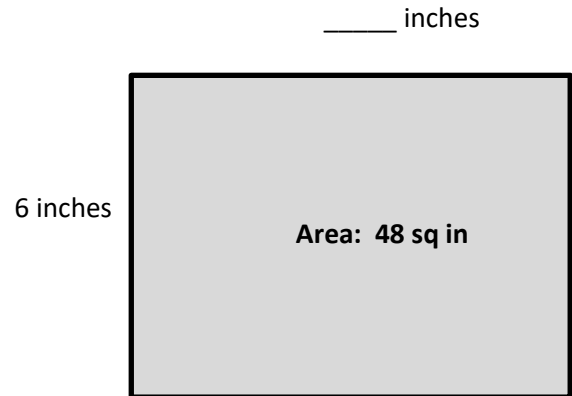
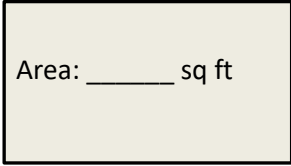BCCS-B   Harvard   Yale   Princeton

Problem Set (Your Turn):

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

a.
7 ft
4 ft | Area: _____ sq ft |

__4__ × __7__ = __28__

b.
7 ft
8 ft | Area: _____ sq ft |

_____ × _____ = _____

c.
6 ft
6 ft | Area: _____ sq ft |

_____ × _____ = _____

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

a.
_____ ft
9 ft | Area = 72 sq ft |

_____ × _____ = _____

_____ ÷ _____ = _____

b.
_____ ft
3 ft | Area = 15 sq ft |

_____ × _____ = _____

_____ ÷ _____ = _____

c.
4 ft
_____ ft | Area = 28 sq ft |

_____ × _____ = _____

_____ ÷ _____ = _____

36

Input (My Turn):

1. Ms. Sherman draws a rectangle that has side lengths of 9 centimeters and 6 centimeters. What is the area of the rectangle? Explain how you found your answer.

2. Ms. Young's bedroom measures 6 feet by 7 feet. Her brother's bedroom measures 5 feet by 8 feet. Ms. Young says their rooms have the same exact floor area. Is she right? Why or why not?

Problem Set (Your Turn):

1. Ms. Neville draws a rectangle that has side lengths of 8 centimeters and 5 centimeters. What is the area of the rectangle? Explain how you found your answer.

2. Ms. Moise's bedroom measures 8 feet by 6 feet. Her brother's bedroom measures 7 feet by 7 feet. Ms. Moise says their rooms have the same exact floor area. Is she right? Why or why not?

Name: _____   Week 20 Day 4 Date: _____

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Application:

Clifford draws a rectangle with a side length of 6 inches and an area of 24 square inches. What is the other side length? How do you know?

?

6 sq. inches

24 sq. inches

The other side is _____. I know this because 6 x _____ = 24

39

Name: _____   Week 20 Day 4 Date: _____

BCCS-B   Harvard   Yale   Princeton

Exit Ticket:

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

9 inches

3 inches

Area: _____ sq in

| 3 in | × | 9 in | = | 27in |

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

_____ inches

6 inches

Area: 54 sq in

_____ × _____ = _____

_____ ÷ _____ = _____

Homework:

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

a.

8 cm

3 cm   Area: _____ sq cm

3   8   24
_____ × _____ = _____

b.

8 cm

6 cm   Area: _____ sq cm

_____ × _____ = _____

c.

4 ft

4 ft   Area: _____ sq ft

_____ × _____ = _____

d.

7 ft

4 ft   Area: _____ sq ft

_____ × _____ = _____

2. Charles draws a rectangle with a side length of 9 inches and an area of 27 square inches. What is the other side length? How do you know?

Day # 5

LEQ: How can I find the total area of a large rectangle?

Objective: I can use the distributive property to find the total area of a large rectangle

Vocabulary:

➢ Distributive Property
➢ Sum
➢ Product

Name: _____ Week 20 Day 5 Date: _____

BCCS-B   Harvard   Yale   Princeton

Do Now:

Area of a Rectangle

Write the area of each rectangle listed below. Don't forget to write **square units** in your answer. Not all rectangles will be used.

4 sq. units

G - _____   A - _____   H - _____

B - _____   F - _____   E - _____

Which rectangle has the largest area? _____

Which two rectangles have the same area? _____ and _____

44

Input (My Turn):

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

5

4

$9 \times 8 = (5 \times 8) + (4 \times 8)$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$
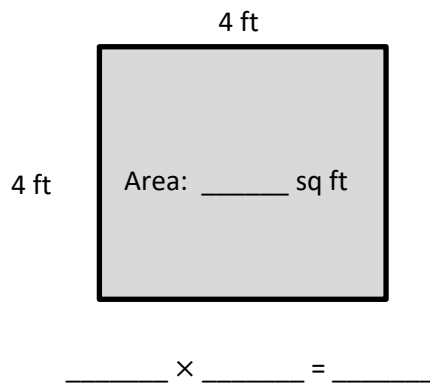
$= \underline{\hspace{1cm}}$
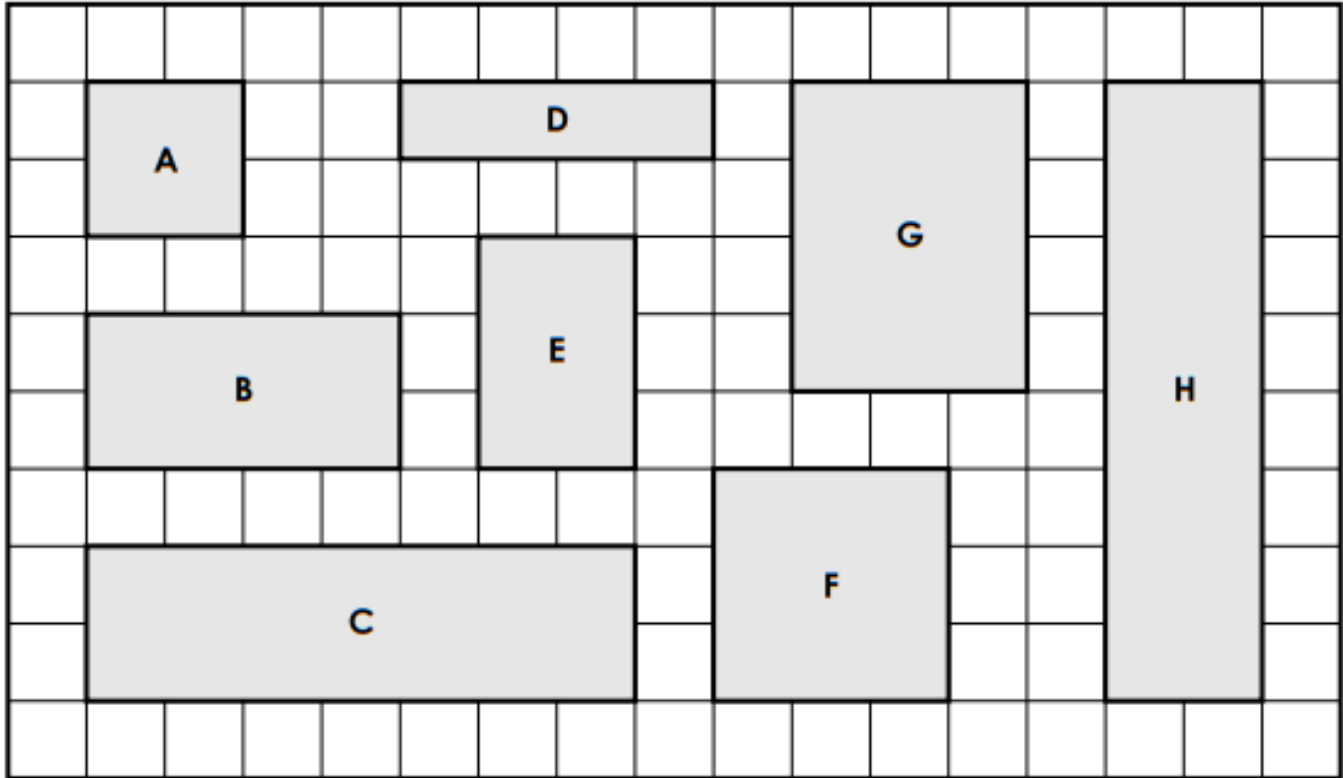
Area: _____ square units

b.

5

2

$12 \times 5 = (\underline{\hspace{1cm}} \times 5) + (\underline{\hspace{1cm}} \times 5)$

$= \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

$= \underline{\hspace{1cm}}$

Area: _____ square units

Name: _____ Week 20 Day 5 Date: _____

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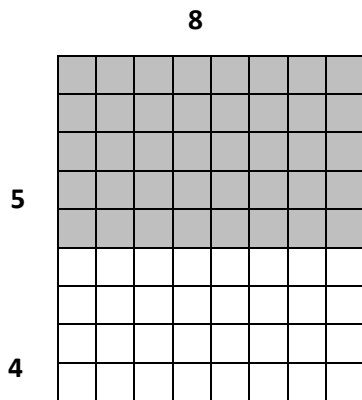## Problem Set (Your Turn):

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.
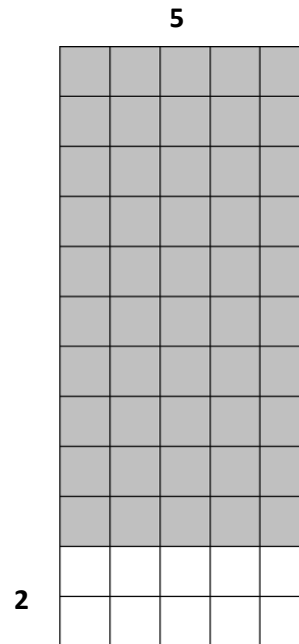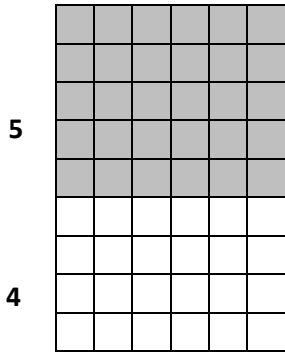
a.
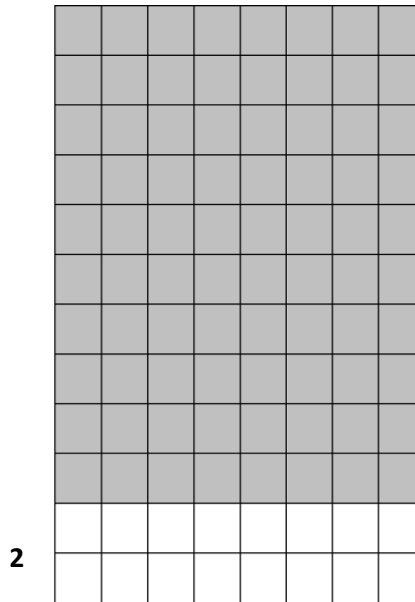
6

5

4

$9 \times 6 = (5 \times 6) + (4 \times 6)$

$= \underline{30} + \underline{24}$

$= \underline{54}$

Area: $\boxed{54}$ square units

b.

8

2

$12 \times 8 = (\underline{} \times 8) + (\underline{} \times 8)$

$= \underline{} + \underline{}$

$= \underline{}$

Area: _____ square units

c.

7

$7 \times 13 = (7 \times \underline{}) + (7 \times 3)$

$= \underline{} + \underline{}$

$= \underline{}$

Area: _____ square units

d.

$9 \times 12 = (9 \times \underline{}) + (9 \times \underline{})$

$= \underline{} + \underline{}$

$= \underline{}$

Area: _____ square units

46

Input (My Turn):

2. Shade an area to break the 16 × 4 rectangle into 2 smaller rectangles. Then, find the sum of the areas of the 2 smaller rectangles to find the total area. Explain your thinking.
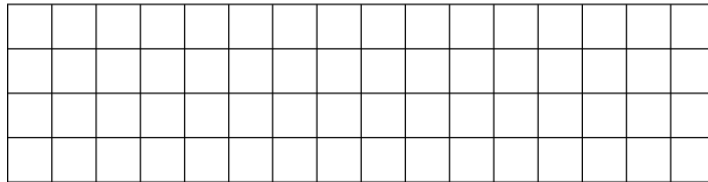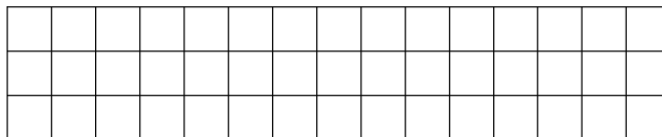
'

Problem Set (Your Turn):

2. Shade an area to break the 15 × 3 rectangle into 2 smaller rectangles. Then, find the sum of the areas of the 2 smaller rectangles to find the total area. Explain your thinking.

Name: _____   Week 20 Day 5 Date: _____

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Application:

Vince imagines 1 more row of eight to find the total area of a 9 × 8 rectangle. Explain how this could help him solve 9 × 8.

48

Name: _____   Week 20 Day 5 Date: _____

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Exit Ticket:

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.

5   2

1.   _____   _____   2.   _____   _____

8

_____   _____

$8 \times 7 = (8 \times$ _____ $) + (8 \times$ _____ $)$ $9 \times 13 = (9 \times$ _____ $) + (9 \times$ _____ $)$

$=$ _____ $+$ _____ $=$ _____ $+$ _____

$=$ _____ $=$ _____

Area: _____ square units   **Area: _____ square units**

Homework:

1. **Label the side lengths of the shaded and unshaded rectangles when needed. Then, find the total area of the large rectangle by adding the areas of the two smaller rectangles**.
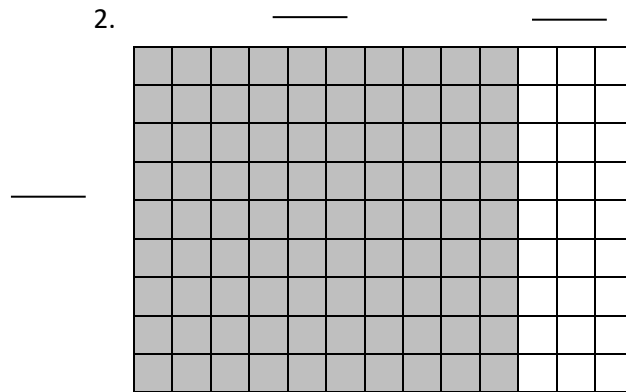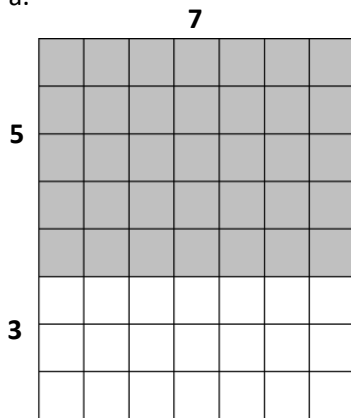
a.

7

5

3

$8 \times 7 = (5 \times 7) + (3 \times 7)$

= _ 35 _ + _ 21 _

= _____ 56

Area: | 56 | square units

b.

4

2

$12 \times 4 = ($ _____ $\times 4) + (2 \times 4)$

= _____ + 8

= _____

Area: _____ square units

2. **Break the 15 × 3 rectangle into 2 rectangles by shading one smaller rectangle within it. Then, find the sum of the areas of the 2 smaller rectangles and show how it relates to the total area. Explain your thinking.**

Name_____

3rd Grade Modified Math Remote Learning Packet

3rd Grade Modified Math Remote Learning Packet

Week 21

- -

Dear Educator,

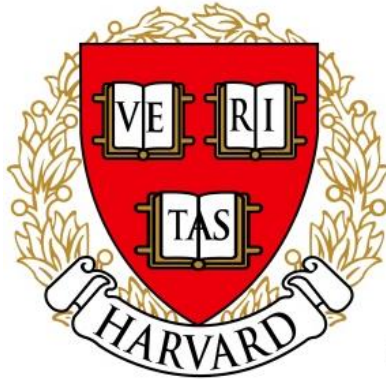My signature is proof that I have reviewed my scholar's work and supported him to the best of my ability to complete all assignments.

_____   _____
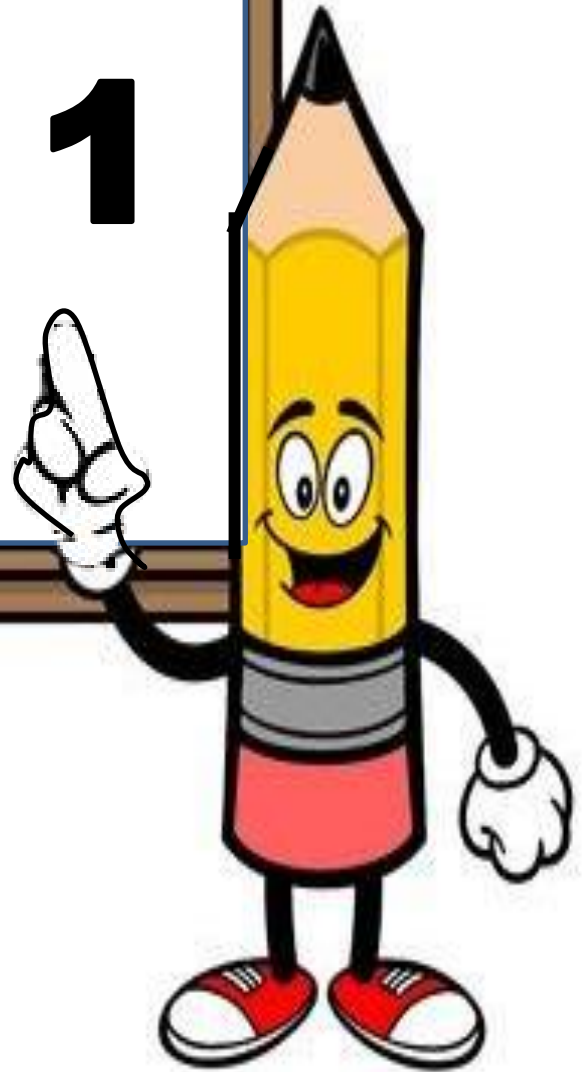(Parent Signature)   (Date)

Parents please note that all academic packets are also available on our website at www.brighterchoice.org under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars.
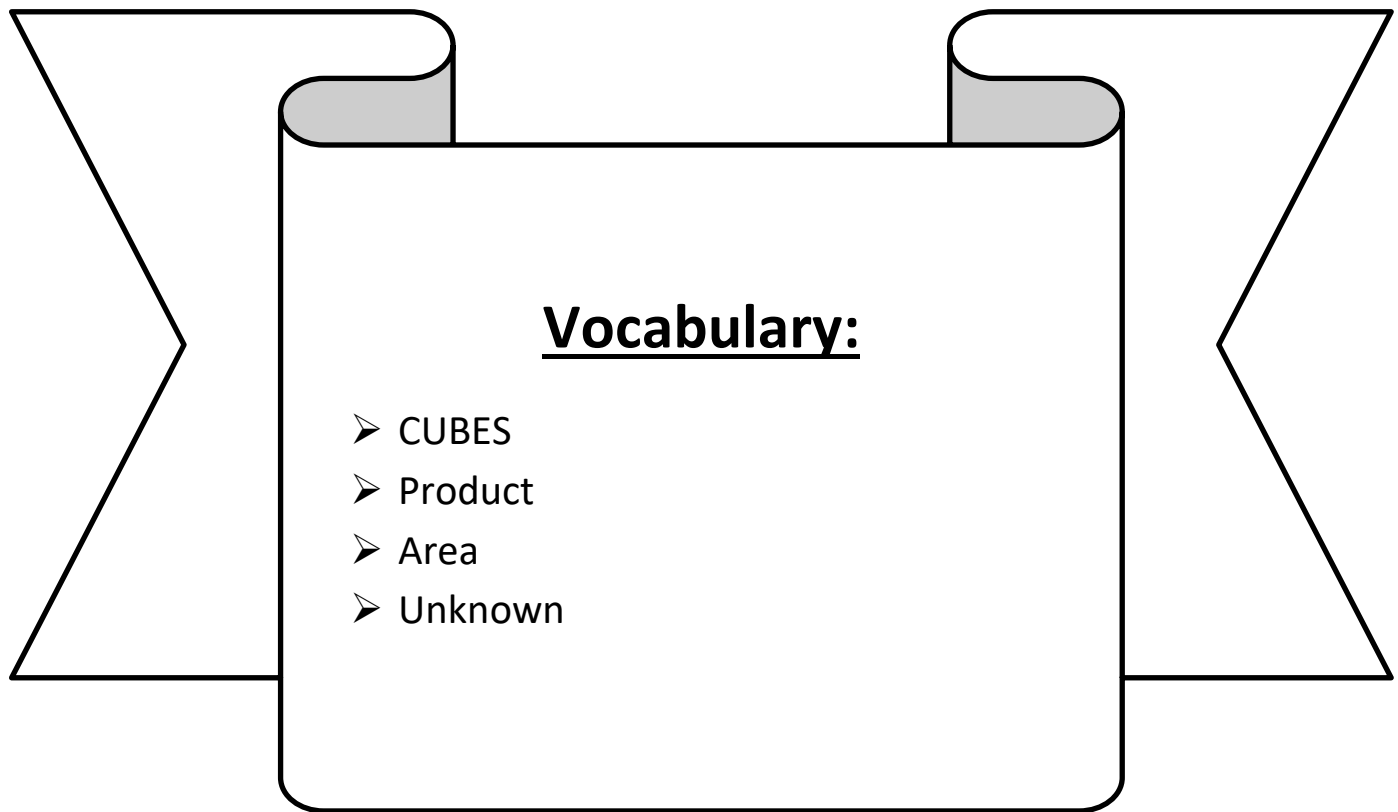
Day # 1

LEQ: How can I solve word problems involving area?

Objective: I can draw and label a rectangle to solve word problems involving area.

Vocabulary:

- ➤ CUBES
- ➤ Product
- ➤ Area
- ➤ Unknown

Do Now:

Finding Area

Find the area (in cm) of the rectangles shown.

Answers

1)
8
2

2)
8
9

3)
5
6

4)
4
8

5)
9
2

6)
7
7

7)
5
7

8)
2
9

9)
6
2

10)
5
4

11)
8
5

12)
7
2

13)
6
3

14)
6
3

15)
4
4

	Answers
1.	16 cm
2.	
3.	
4.	32 in
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	

54

Input (My Turn):

1. Each side on a sticky note measures 9 centimeters. What is the area of the sticky note?

2. Shahidullah tiles the rectangle below using his square pattern blocks.

   a. Find the area of his rectangle in square units. Then, draw and label a different rectangle with whole number side lengths that has the same area.

   b. Can you draw another rectangle with different whole number side lengths and have the same area? Explain how you know.

Name: _____   Week 21 Day 1 Date: _____

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Problem Set (Your Turn):

1. Each side on a sticky note measures 16 centimeters. What is the area of the sticky note?

16 +16+16+16

16 x 4 =

2. Asante tiles the rectangle below using his square pattern blocks.

    a. Find the area of his rectangle in square units. Then, draw and label a different rectangle with whole number side lengths that has the same area.

    c. Can you draw another rectangle with different whole number side lengths and have the same area? Explain how you know.

Input (My Turn):

3. An artist paints a 5 foot × 18 foot mural on a wall. What is the total area of the mural? Use the break apart and distribute strategy.

10 ft   8 ft

5 ft

4. Jeremiah glues 4 identical pieces of paper as shown below and makes a square. Find the unknown side length of 1 piece of paper. Then, find the total area of 2 pieces of paper.

16 cm

? cm

16 cm

Problem Set (Your Turn):

3. An artist paints a 4 foot × 16 foot mural on a wall. What is the total area of the mural? Use the break apart and distribute strategy.

```
        10 ft            6 ft
      ┌──────────────┬──────────┐
4 ft  │              ┊          │
      └──────────────┴──────────┘
```

4. Susan glues 3 identical pieces of paper as shown below and makes a square. Find the unknown side length of 1 piece of paper. Then, find the total area of 2 pieces of paper.

```
            9 cm
      ┌──────────────┐  ↕
      │              │  ? cm
      ├──────────────┤
9 cm  │              │
      ├──────────────┤
      │              │
      └──────────────┘
```

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Circle key numbers & units
What do I know?

Underline the question
What am I being asked to solve?

Box math clue words
Am I going to +, -, x, or ÷?

Evaluate and Eliminate
What steps do I take?
What information don't I need?

Solve and Show your work
Does my answer make sense?
How can I double check?

✓ Who/what is this problem about? 📷

✓ How do we solve this problem? ➕ ➖ ✖️ ➗

✓ 📝 Show and check your work completely. ☑

Application:

A rectangular garden has a total area of 48 square yards. Draw and label two possible rectangular gardens with different side lengths that have the same area.

6 yd.

8 yd.

Exit Ticket:

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

9 inches

Area = 63 square inches

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

Homework:

1. A square calendar has sides that are 6 inches long. What is the calendar's area?

6 in

2. Each ⬜ is 1 square unit. Sienna uses the same square units to draw a 6 × 2 rectangle and says that it has the same area as the rectangle below. Is she correct? Explain why or why not.

3. The surface of an office desk has an area of 15 square feet. Its length is 5 feet. How wide is the office desk?

Day # 2

LEQ: How can I find the area of a composite rectangle without a grid?

Objective: I can find the areas of composite figures by creating two different rectangles through decomposition or completing the rectangle and multiplying LxW.

Vocabulary:

➢ Composite
➢ Decompose
➢ Grid
➢ Area
➢ Sum
➢ Length and Width

Name: _____   Week 21 Day 2 Date: _____

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Do Now:

Addition With Regrouping

Add.

1.

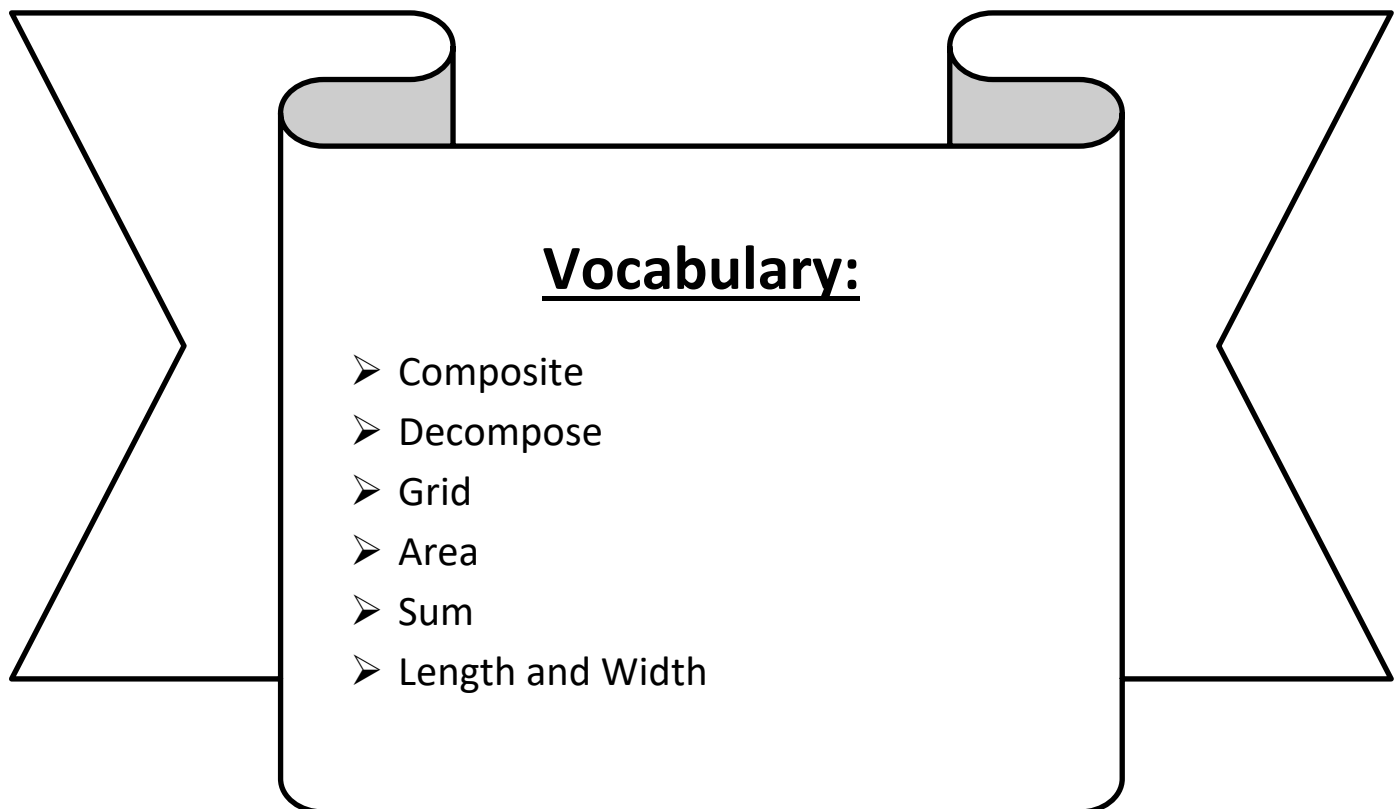| hundreds	tens	ones
	1	
5	2	3
+ 1	2	8
6	5	1

2.

hundreds	tens	ones
4	6	5
+ 1	9	2

3.

hundreds	tens	ones
2	8	9
+ 2	0	4

4.

hundreds	tens	ones
3	4	3
+ 1	7	4

5.

hundreds	tens	ones
6	1	7
+ 2	8	9

6.

hundreds	tens	ones
5	9	2
+ 3	2	9

64

Name: _____ Week 21 Day 2 Date: _____

Input (My Turn):

A shape made up of 2 or more rectangles is an irregular or _____ shape. To find the area of a composite shape, we can _____to make separate rectangles and add to find the area of the figure. We can also complete a larger rectangle and subtract the unshaded area.

Break Apart and Distribute:

Completing the Rectangle:

6 cm

6 cm

4 cm

2 cm

11 ft

4 ft

9 ft

_____ ft

_____ ft   5 ft

Input (My Turn):

1. Each of the following figures is made up of 2 rectangles. Find the total area of each figure.

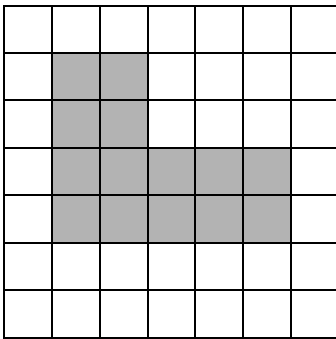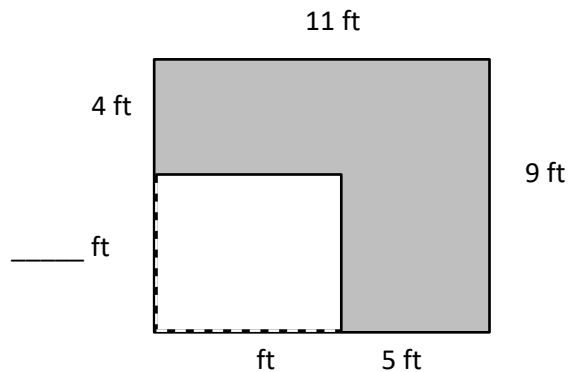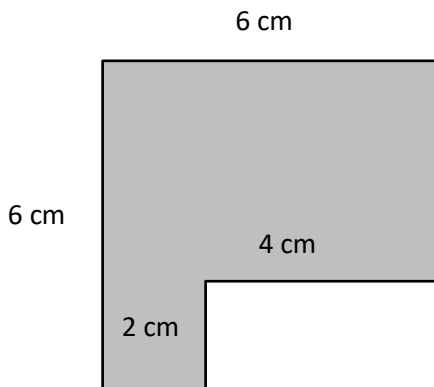**Figure 1**: Area of A + Area of B: _____ sq units + _____ sq units = _____ sq units

Figure 2: Area of C + Area of D: _____ sq units + _____ sq units = _____ sq units

Figure 3: Area of E + Area of F: _____ sq units + _____ sq units = _____ sq units

Figure 4: Area of G + Area of H: _____ sq units + _____ sq units = _____sq units

Problem Set (Your Turn):

1. Each of the following figures is made up of 2 rectangles. Find the total area of each figure.

Figure 1: Area of A + Area of B: _____ sq units + _____ sq units = _____ sq units

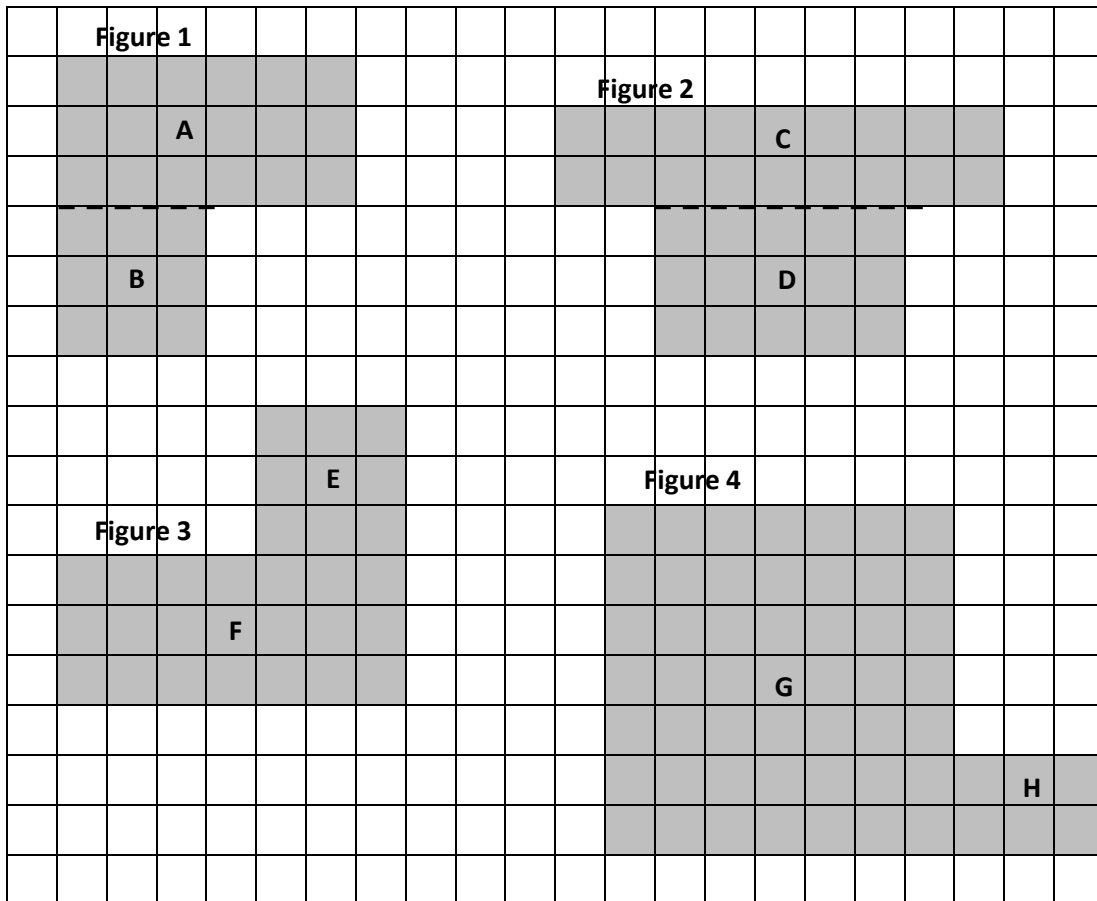**Figure 2:** Area of C + Area of D: _____ sq units + _____ sq units = _____ sq units
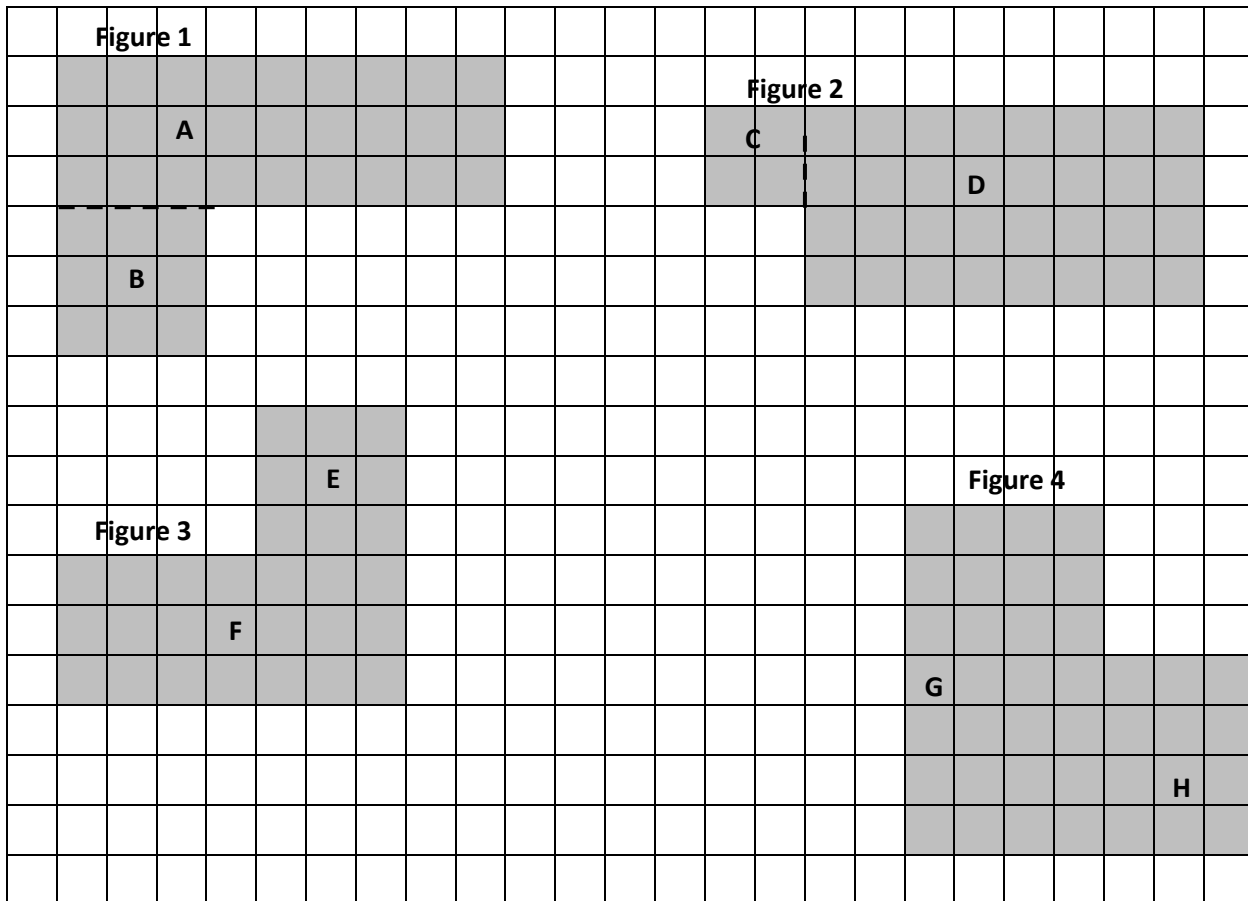
Figure 3: Area of E + Area of F: _____ sq units + _____ sq units = _____ sq units

Figure 4: Area of G + Area of H: _____ sq units + _____ sq units = _____sq units

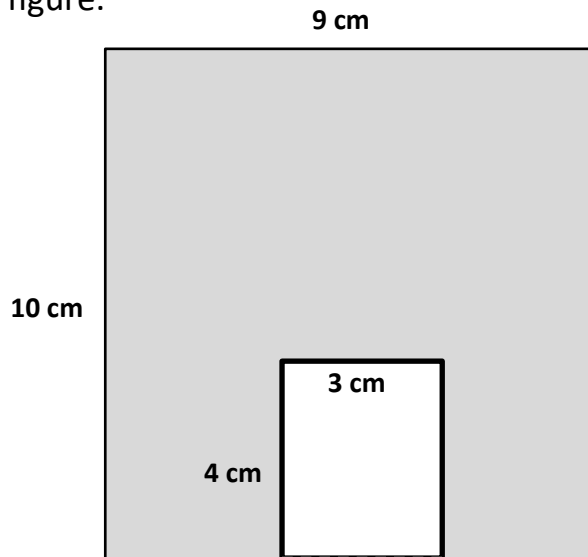## Problem Set (Your Turn):

2. The figure shows a small rectangle cut out of a bigger rectangle. Find the area of the shaded figure.

9 cm

10 cm

3 cm

4 cm

Area of the shaded figure: _____ – _____ = _____

Area of the shaded figure: _____ square centimeters

3. The figure shows a small rectangle cut out of a big rectangle.

4 cm   _____ **cm**

_____ **cm**

7 cm

3 cm

9 cm

a. Label the unknown measurements.

b. Area of the big rectangle:

  _____ cm × _____ cm = _____ sq cm

c. Area of the small rectangle:

  _____ cm × _____ cm = _____ sq cm

d. Find the area of the shaded figure.

Application:

Alex says the area of the figure below is 56 square centimeters. Becky says it's 47 square centimeters. Who do you agree with? Show your thinking.

7 cm

8 cm

3 cm

3 cm

Exit Ticket:

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

Name: _____   Week 21 Day 2 Date: _____
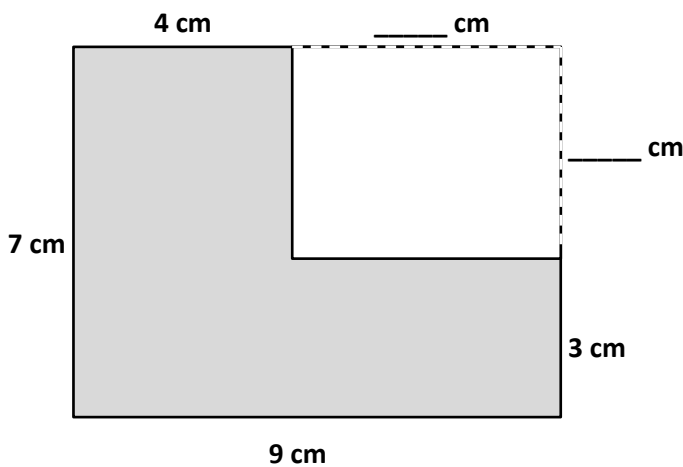
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Homework:

1. Each of the following figures is made up of 2 rectangles. Find the total area of each figure.

Figure 1: Area of A + Area of B: _____ sq units + _____ sq units = _____ sq units

Figure 2: Area of C + Area of D: _____ sq units + _____ sq units = _____ sq units

Figure 3: Area of E + Area of F: _____ sq units + _____ sq units = _____ sq units

Figure 4: Area of G + Area of H: _____ sq units + _____ sq units = _____ sq units

Homework:

2. The figure shows a small rectangle cut out of a big rectangle.

3
_____ cm   6 cm

4
_____ cm

4 cm

8 cm

9 cm

a. Label the unknown measurements.

b. Area of the big rectangle:

       _____ cm × _____ cm = _____ sq cm

c. Area of the small rectangle:

       _____ cm × _____ cm = _____ sq cm

d. Find the area of the shaded figure.

Day # 3

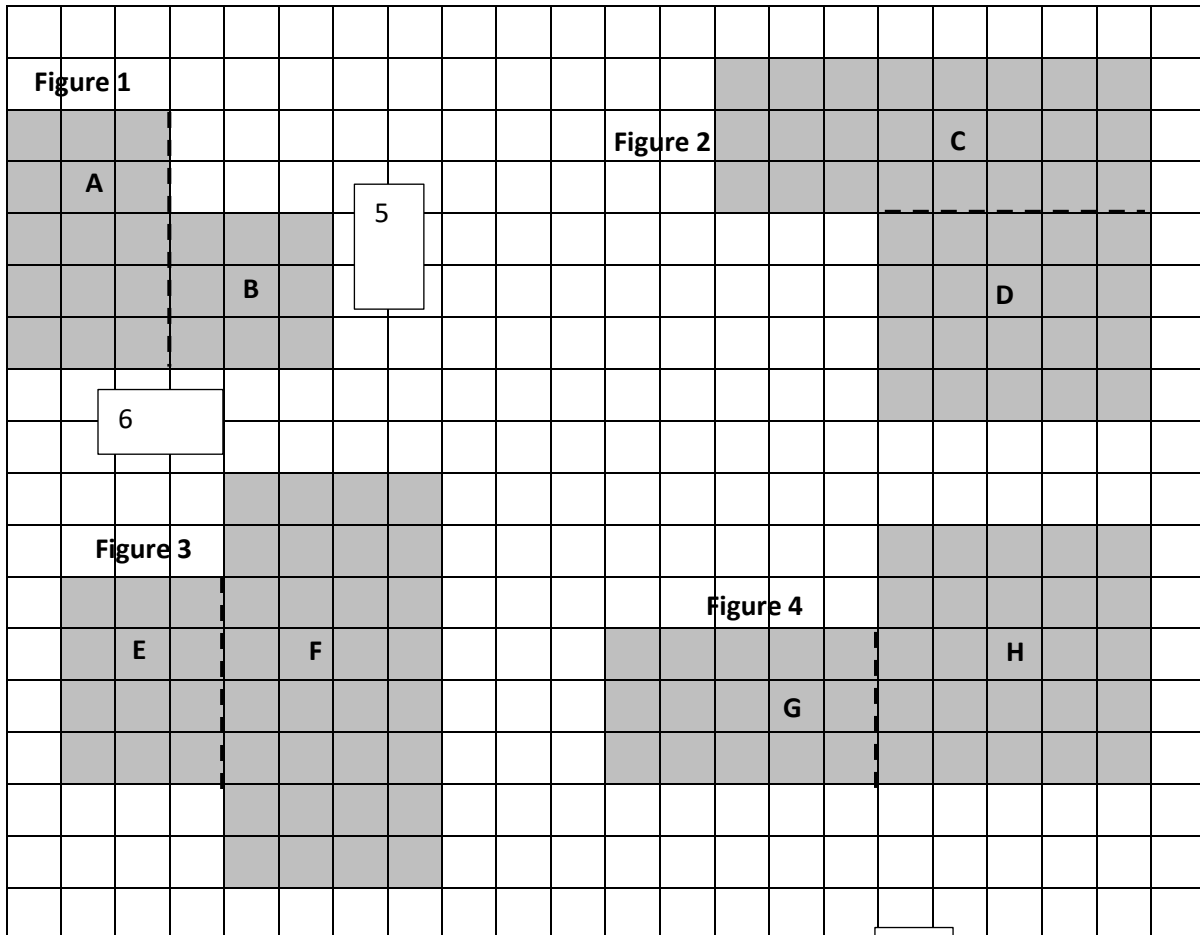**LEQ:** How can I find the area of a composite rectangle without a grid?

Objective: I can find the areas of composite figures by creating two different rectangles through decomposition or completing the rectangle and multiplying LxW.

Vocabulary:

➢ Composite
➢ Sum
➢ Products
➢ Decompose

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Do Now:

Calculate each product.

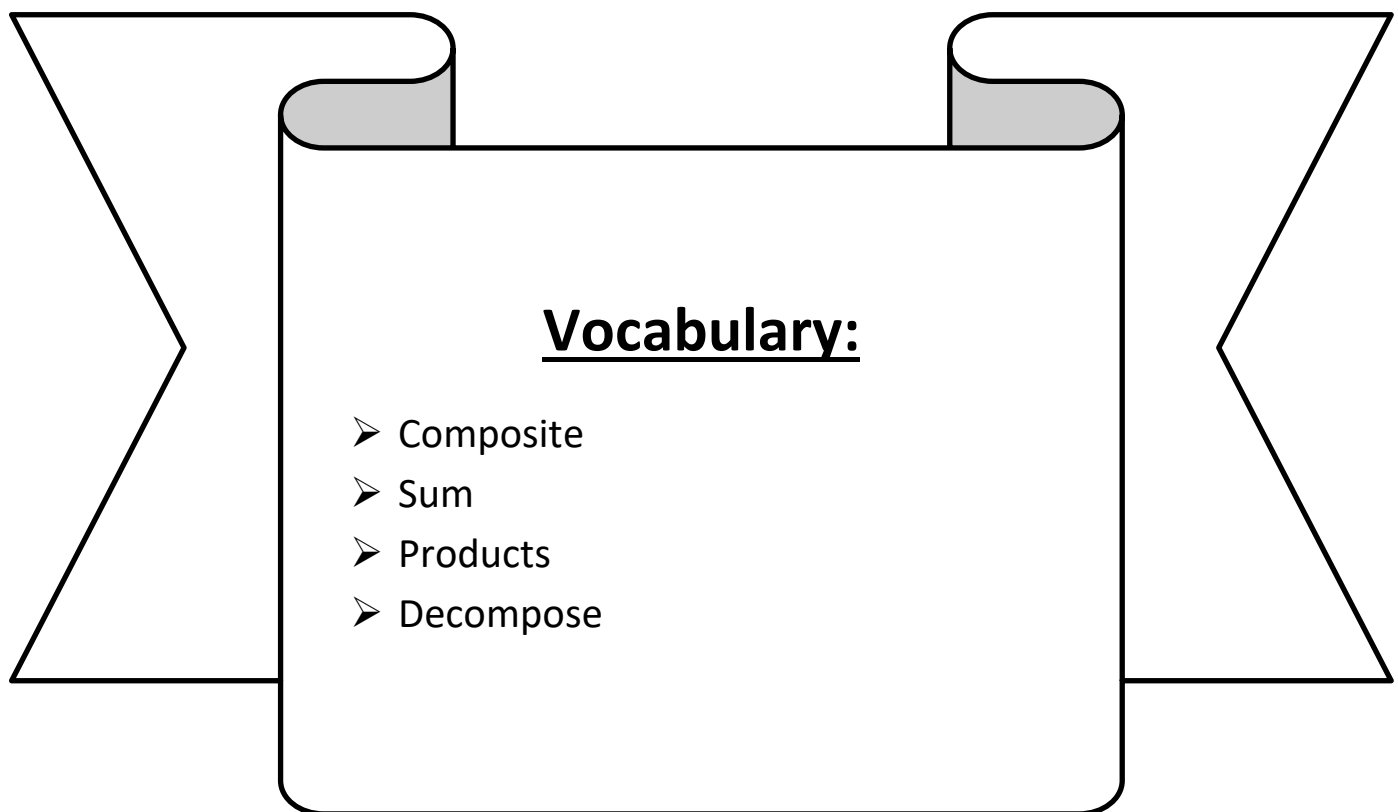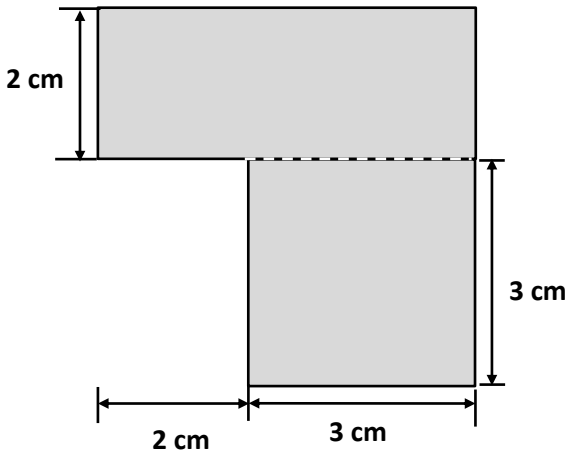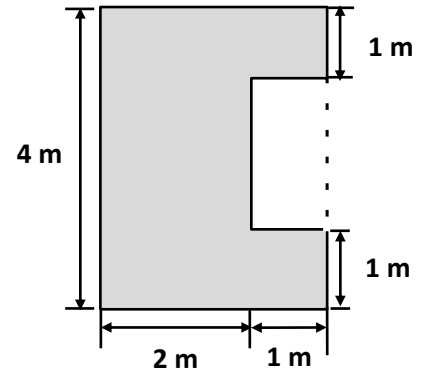|									
6 × 9 **54**	9 × 11 **99**	4 × 9	9 × 9	9 × 7	9 × 1	9 × 8	5 × 9	10 × 9	12 × 9
3 × 9	9 × 2	9 × 12	9 × 6	10 × 9	9 × 11	4 × 9	9 × 2	9 × 5	9 × 3
9 × 7	8 × 9	1 × 9	9 × 9	9 × 6	9 × 7	12 × 9	3 × 9	11 × 9	9 × 5
10 × 9	4 × 9	9 × 8	9 × 1	9 × 9	9 × 2	5 × 9	9 × 7	10 × 9	4 × 9
9 × 9	9 × 3	6 × 9	9 × 12	9 × 1	8 × 9	2 × 9	9 × 11	11 × 9	3 × 9
9 × 9	9 × 12	4 × 9	5 × 9	6 × 9	7 × 9	8 × 9	9 × 1	10 × 9	9 × 2
9 × 2	12 × 9	8 × 9	9 × 1	9 × 11	9 × 9	3 × 9	10 × 9	5 × 9	9 × 6
9 × 4	9 × 7	9 × 9	10 × 9	9 × 1	4 × 9	9 × 3	7 × 9	9 × 6	11 × 9
8 × 9	2 × 9	9 × 12	5 × 9	9 × 1	9 × 2	9 × 10	12 × 9	9 × 9	9 × 11
9 × 7	5 × 9	4 × 9	9 × 3	8 × 9	6 × 9	3 × 9	4 × 9	1 × 9	2 × 9

75

Input (My Turn):

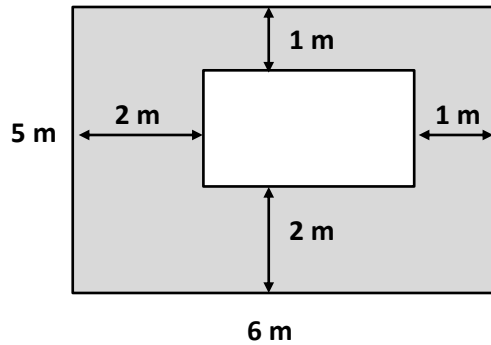**1. Find the area of each of the following figures. All figures are made up of rectangles.**

a.

b.

2. The figure below shows a small rectangle in a big rectangle. Find the area of the shaded part of the figure.

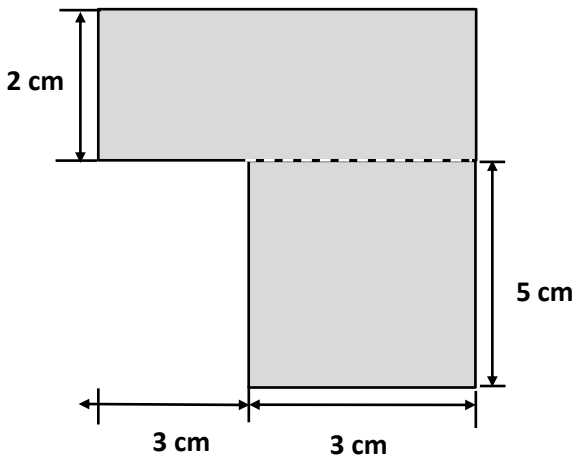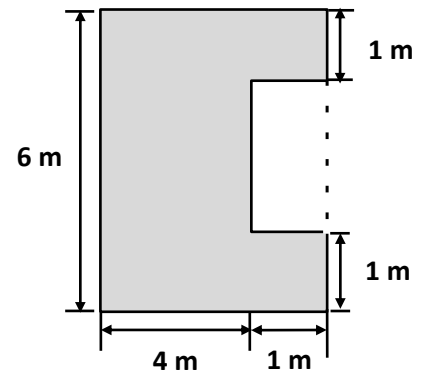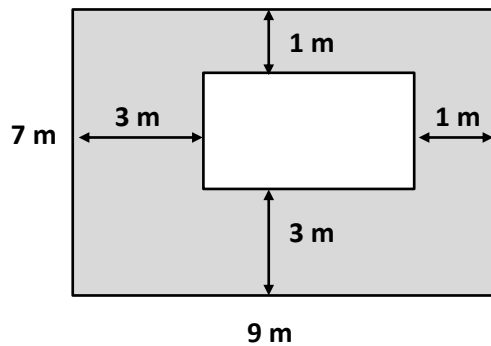## Problem Set (Your Turn):

1. Find the area of each of the following figures. All figures are made up of rectangles.

a.

b.

2. The figure below shows a small rectangle in a big rectangle. Find the area of the shaded part of the figure.

Input (My Turn):

3. Manny draws a 9 cm by 6 cm rectangle on his grid paper. He shades a square with a side length of 4 cm inside his rectangle. What area of the rectangle is left unshaded?

4. A paper rectangle has a length of 6 inches and a width of 8 inches. A square with a side length of 3 inches was cut out of it. What is the area of the remaining paper?

Problem Set (Your Turn):

3. Manny draws an 8 cm by 4 cm rectangle on his grid paper. He shades a square with a side length of 3 cm inside his rectangle. What area of the rectangle is left unshaded?

4. A paper rectangle has a length of 5 inches and a width of 9 inches. A square with a side length of 4 inches was cut out of it. What is the area of the remaining paper?

Name: _____   Week 21 Day 3 Date: _____

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Circle key numbers & units
What do I know?

Underline the question
What am I being asked to solve?

Box math clue words
Am I going to +, -, x, or ÷?

Evaluate and Eliminate
What steps do I take?
What information don't I need?

Solve and Show your work
Does my answer make sense?
How can I double check?

✓ Who/what is this problem about?

✓ How do we solve this problem?

✓ Show and check your work completely.

Application:

Tim and Evan both have paper rectangles measuring 6 cm by 9 cm. Tim cuts a 3 cm by 4 cm rectangle out of his, and Evan cuts a 2 cm by 6 cm rectangle out of his. Tim says he has more paper left over. Evan says they have the same amount. Who is correct? Show your work below.

Name: _____   Week 21 Day 3 Date: _____

BCCS-B   Harvard   Yale   Princeton

Exit Ticket:

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?
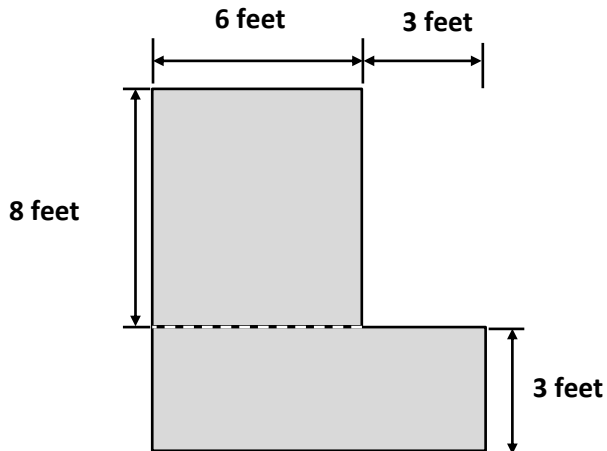
Homework:

1. **Find the area of each of the following figures. All figures are made up of rectangles.**

a.

b.

Day # 4

LEQ: How can I label and partition a whole into equal parts?

Objective: I can draw lines to make equal parts and count the number of parts to label its fractional unit.

Vocabulary:

- ➤ Partition
- ➤ Whole
- ➤ Fraction
- ➤ Fractional Unit

BCCS-B   Harvard   Yale   Princeton

Do Now:

Rabbits on Vacation

Subtract to find the differences.
Then match the letters to the
blanks below to solve the riddle.

5	15

E 465
−239
226

N 239
− 84

I 888
−295

E 619
−461

A 212
−190

N 770
− 56

H 532
−341

P 548
− 98

A 534
−519

L 300
−190

A 912
−672

R 467
− 58

How do rabbits travel?

___ ___   ___
593 155   15

___ ___ ___ ___ ___ ___ ___ ___ ___
191 240 409 226 450 110 22 714 158

Name: _____   Week 21 Day 4 Date: _____

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Input (My Turn):

A _____ is a part of a whole amount. We use fractions to represent a section of

an entire shape. A fractional _____ is the amount of equal parts a shape is divided or

_____ into. For example, the fractional unit for 2 equal parts is halves.

Partition each rectangle to show the fractional unit.

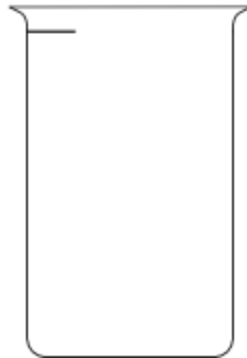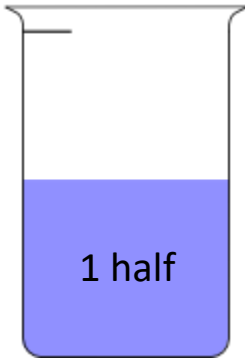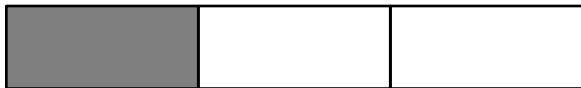| Fractional Unit	Rectangle
Halves	
Thirds	
Fourths	
Fifths	
Sixths	

Input (My Turn):

1. A beaker is considered full when the liquid reaches the fill line shown near the top. Estimate the amount of water in the beaker by shading the drawing as indicated. The first one is done for you.
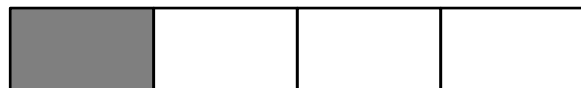
1 half

1 fourth

1 third

2. Juanita cut her string cheese into equal pieces as shown in the rectangles below. In the blanks below, name the fraction of the string cheese represented by the shaded part.

_____

_____

_____

Name: _____   Week 21 Day 4 Date: _____

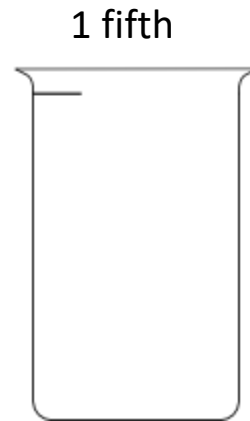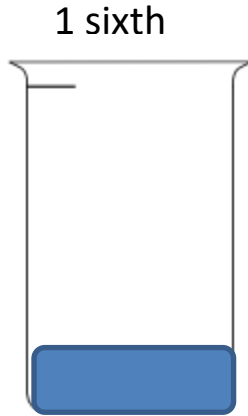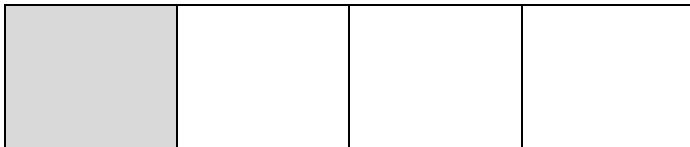BCCS-B   Harvard   Yale   Princeton
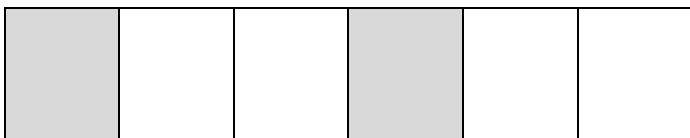
Problem Set (Your Turn):

1. A beaker is considered full when the liquid reaches the fill line shown near the top.

Estimate the amount of water in the beaker by shading the drawing as indicated.

1 sixth	1 fifth

2. Jacob cut his string cheese into equal pieces as shown in the rectangles below. In the blanks below, name the fraction of the string cheese represented by the shaded part.

_____

_____

_____

Name: _____   Week 21 Day 4 Date: _____

BCCS-B   Harvard   Yale   Princeton

Input (My Turn):

In the space below, draw a small rectangle. Estimate to split it into 2 equal parts. How many lines did you draw to make 2 equal parts? What is the name of each fractional unit?

I drew _____ lines to make 2 equal parts.

Fraction Unit: _____

Draw another small rectangle. Estimate to split it into 3 equal parts. How many lines did you draw to make 3 equal parts? What is the name of each fractional unit?

I drew _____ lines to make 3 equal parts.

Fraction Unit: _____

3. Mrs. Mclean has a strip of wood 12 inches long. She cuts it into pieces that are each 6 inches in length. What fraction of the wood is one piece? Draw a picture to show the piece of wood and how Mrs. Mclean cut it.

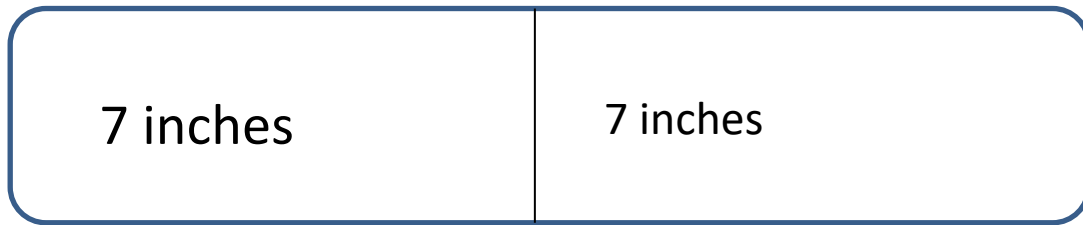Name: _____   Week 21 Day 4 Date: _____

BCCS-B   Harvard   Yale   Princeton

Problem Set (Your Turn):

3. Mrs. Cosgrave has a strip of wood 14 inches long. She cuts it into pieces that are each **7 inches in length.** What fraction of the wood is one piece? Draw a picture to show the piece of wood and how Mrs. Cosgrave cut it.

7 inches	7 inches

14 inches

4. Messiah has a strip of paper 12 inches long. He cuts it into pieces that are each **4 inches in length.** What fraction of the strip is one piece? Draw a picture to show the piece of paper and how Messiah cut it.

12 inches

- ✓ Who/what is this problem about?
- ✓ How do we solve this problem?
- ✓ Show and check your work completely.

C Circle key numbers & units
    What do I know?

U Underline the question
    What am I being asked to solve?

B Box math clue words
    Am I going to +, -, x, or ÷ ?

E Evaluate and Eliminate
    What steps do I take?
    What information don't I need?

S Solve and Show your work
    Does my answer make sense?
    How can I double check?

Application:

Ms. Sherman has a strip of wood 12 inches long and makes fractional units of thirds. How long is one third?

12 inches

Name: _____   Week 21 Day 4 Date: _____

BCCS-B   Harvard   Yale   Princeton

Exit Ticket:

1. Name the fraction that is shaded.   2. Estimate to partition the rectangle into thirds.

_____

3. A plumber has 12 feet of pipe. He cuts it into pieces that are each 3 feet in length. What fraction of the pipe would one piece represent?
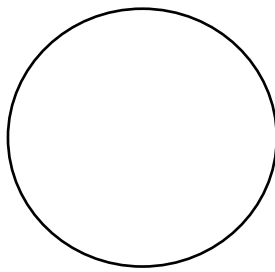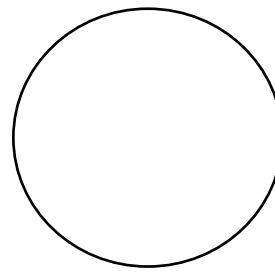
Name: _____   Week 21 Day 4 Date: _____

BCCS-B   Harvard   Yale   Princeton

1. Each circle represents 1 whole pie. Estimate to show how you would cut the pie into fractional units as indicated below.

| halves | thirds | sixths |

2. Each rectangle represents 1 sheet of paper. Estimate to draw lines to show how you would cut the paper into fractional units as indicated below.

| halves | fourths | eighths |

3. Yuri has a rope 12 meters long. He cuts it into pieces that are each 2 meters long. What fraction of the rope is one piece? Draw a picture.

Day # 5

LEQ: How can I identify unit fractions in shapes with equal parts?

Objective: I can name the fractional unit and then count and tell how many of those units are shaded.

Vocabulary:

➢ Fraction
➢ Part
➢ Whole

Do Now: **a.**

This circle has ____2____ equal parts.

It is divided into _____halves_____.

One part is called ____one half____.

b.

This rectangle has _____ equal parts.
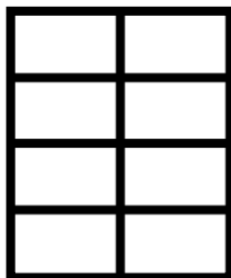
It is divided into _____.

One part is called _____.

c.

This circle has _____ equal parts.

It is divided into _____.

One part is called _____.

d.

This rectangle has _____ equal parts.

It is divided into _____.

One part is called _____.

e.

This circle has _____ equal parts.

It is divided into _____.

96

One part is called _____

Input (My Turn):

Circle the shapes that are divided into **equal** parts. (circle more than one)

Equal parts are pieces that are the same _____.

1. Each shape is a whole divided into equal parts. Name the fractional unit, and then count and tell how many of those units are shaded.
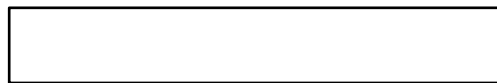
_____   _____

_____   _____

2. Each shape is 1 whole. Divide and shade to show the given fraction.

     1 half   4 sixths   2 thirds
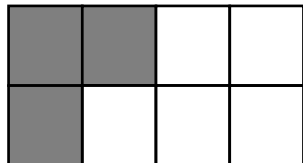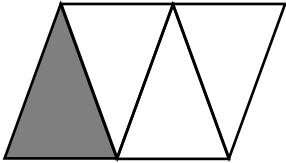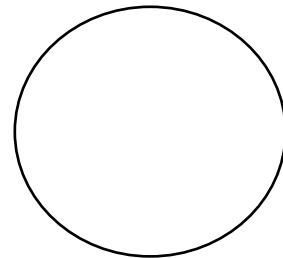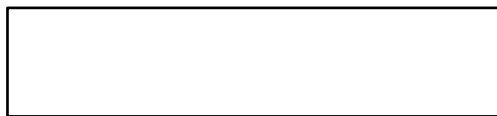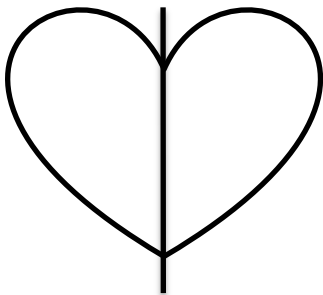
Name: _____ Week 21 Day 5 Date: _____

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Problem Set (Your Turn):

1. Each shape is a whole divided into equal parts. Name the fractional unit, and then count and tell how many of those units are shaded.

▭

One fourth

_____   _____   _____   _____

_____   _____   _____   _____

2. Each shape is 1 whole. Divide and shade to show the given fraction.
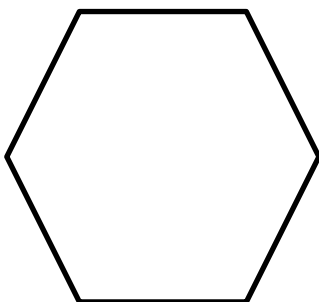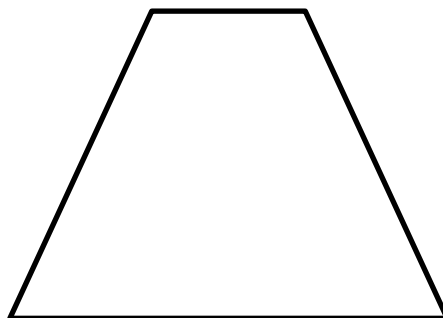
1 half | 1/2 | 2 fifths | 2/5 | 3 eighths | 3/8 |

3 sixths   1 third
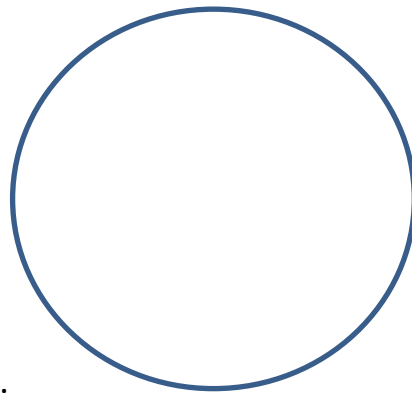
98

Input (My Turn):

3. Charlie wants to equally share a candy bar with 4 friends. Draw Charlie's candy bar. Show how he can divide his candy bar so everyone gets an equal share. What fraction of the candy bar does each person receive? **Add Charlie to his 4 friends**

Each person receives _____.

4.   Megan wants to equally share a pizza pie with 7 friends. Draw Megan's pizza pie. Show how she can divide her pizza pie so everyone gets an equal share. What fraction does each person receive? **Add Megan to her 7 friends**

Each person receives _____.

Name: _____   Week 21 Day 5 Date: _____

BCCS-B   Harvard   Yale   Princeton
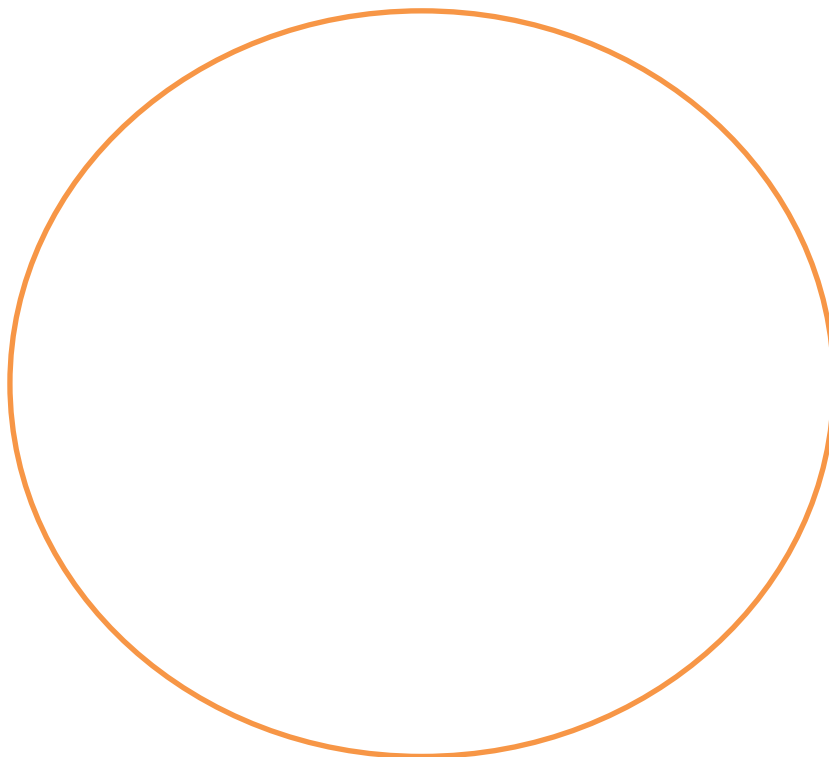
Problem Set (Your Turn):

3. Carter wants to equally share a bread loaf with 3 friends. Draw Carter's bread loaf. Show how he can divide his it so everyone gets an equal share. What fraction of the bread loaf does each person receive? **Add Carter to his 3 friends**

Each person receives _____.

4.   Mrs. Page wants to equally share a pie with 9 friends. Draw Mrs. Page's pie. Show how she can divide her pie so everyone gets an equal share. What fraction does each person receive? **Don't forget to add Mrs. Page to the 9 friends**

100

Application:

Marcos has a 1-liter jar of milk to share with his mother, father, and sister. Draw a picture to show how Marcos must share the milk so that everyone gets the same amount. What fraction of the milk does each person get?

Name: _____   Week 21 Day 5 Date: _____

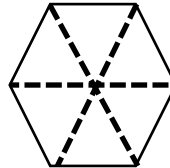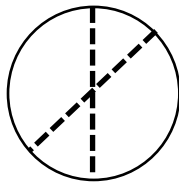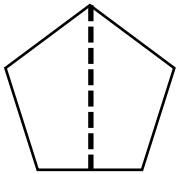BCCS-B   Harvard   Yale   Princeton

Exit Ticket:

1.

_____ sevenths are **shaded**

2. Circle the shapes that are divided into **equal parts.**

3. Steven wants to equally share his pizza with his 3 sisters. What fraction of the pizza does he and each sister receive?

He and each sister receive _____

Homework:

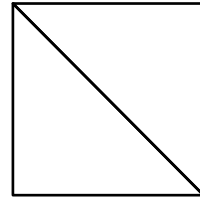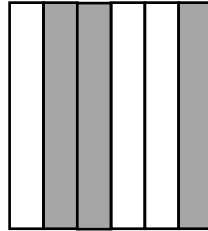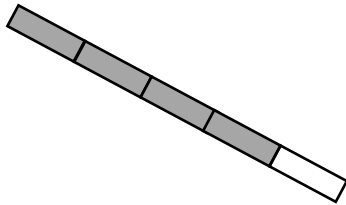1. Each shape is a whole divided into equal parts. Name the fractional unit, and then count and tell how many of those units are shaded. The first one is done for you.
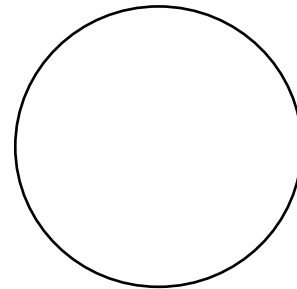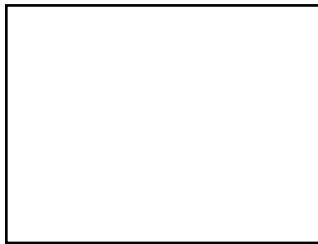
_____Fourths_____   _____   _____   _____

2 fourths are shaded.   _____   _____   _____

2. Each shape is 1 whole. Estimate to divide each into equal parts. Divide each whole using a different fractional unit. Write the name of the fractional unit on the line below the shape.

_____   _____   _____

3. Anita uses 1 sheet of paper to make a calendar showing each month of the year. Draw Anita's calendar. Show how she can divide her calendar so that each month is given the same space. What fraction of the calendar does each month receive?

Each month receives _____