



Name \_\_\_\_\_

## 2<sup>nd</sup> Grade Math Remote Learning Packet

Weeks 7-9

May 11<sup>th</sup> -29<sup>th</sup>



Parents please note that all academic packets are mailed home to scholars but are also available on our website at [www.brighterchoice.org](http://www.brighterchoice.org) under the heading "Remote Learning." All academic packet assignments are mandatory and must be completed by all scholars. Online assignments are to be completed if you have access to technology. If for whatever reason you do not receive a packet in the mail, every Wednesday between the hours of 8:00am-11:00am someone will be at our school to provide a hard copy. We thank you greatly for your continued support!

# Week 7: Scope & Sequence

Date	Standards	Description of Packet Assignment	Supplemental Online Resources
5/11	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to use manipulatives (any small object) to create equal groups.	Watch this video on Making Equal Groups <a href="https://jr.brainpop.com/math/multiplicationanddivision/makingequalgroups/">https://jr.brainpop.com/math/multiplicationanddivision/makingequalgroups/</a> User Name: ballston Password: scotties 1. Watch Video 2. Take the easy Quiz Challenge yourself with the hard Quiz  You Tube Video on Making Equal Groups <a href="https://www.youtube.com/watch?v=QWnLKJ37IPg">https://www.youtube.com/watch?v=QWnLKJ37IPg</a>
5/12	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to use math drawings to represent equal groups, and relate to repeated addition.	Brain Pop Jr. Repeated Addition User Name: ballston Password: scotties  1. Watch Video 2. Take the easy Quiz Challenge yourself with the hard Quiz <a href="https://jr.brainpop.com/math/multiplicationanddivision/repeatedaddition/">https://jr.brainpop.com/math/multiplicationanddivision/repeatedaddition/</a>
5/13	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to use math drawings to represent equal groups, and relate to repeated addition.	<p style="text-align: center;"><b>Rows and Columns</b></p> <a href="https://www.youtube.com/watch?v=0fne5Rs8a-4">https://www.youtube.com/watch?v=0fne5Rs8a-4</a>
5/14	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be to represent equal groups with tape diagrams, and relate to repeated addition.	<p style="text-align: center;"><b>Rows and Columns</b></p> <a href="https://www.youtube.com/watch?v=vb1xchy2vSM&amp;t=161s">https://www.youtube.com/watch?v=vb1xchy2vSM&amp;t=161s</a>
5/15	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to compose arrays from rows and columns, and count to find the total using objects.	<p style="text-align: center;"><b>Rows and Columns</b></p> <a href="https://www.youtube.com/watch?v=0J-3PDj6bK8">https://www.youtube.com/watch?v=0J-3PDj6bK8</a>

Name \_\_\_\_\_

Date: May 11, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

Parent Signature: \_\_\_\_\_  
(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with...	Today my scholar struggled with understanding...



**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

**EQUAL GROUPS**

**3 × 6 = 18**

↓                      ↓                      TOTAL #

# OF GROUPS      # IN EACH GROUP

Module 6 Lesson 1

Circle groups of two apples. Identify how many groups there are.



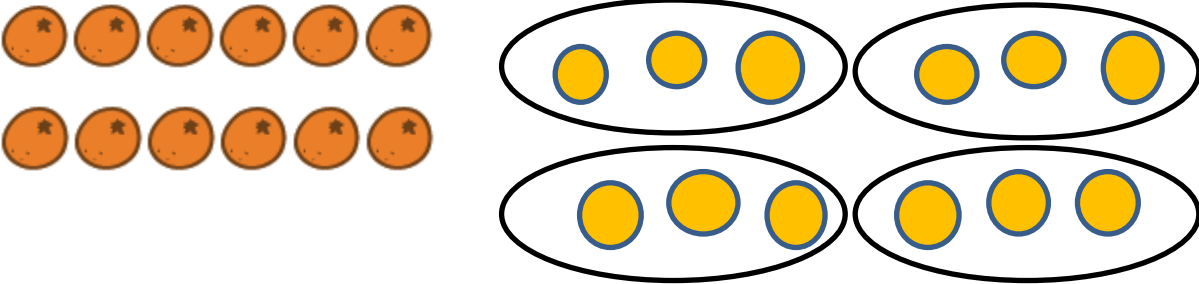
There are 5 groups of two apples.

1. Circle groups of three balls.



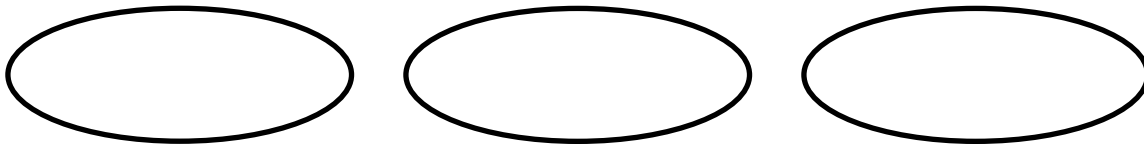
There are \_\_\_\_\_ groups of three balls.

3. Redraw the 12 oranges into 4 equal groups.



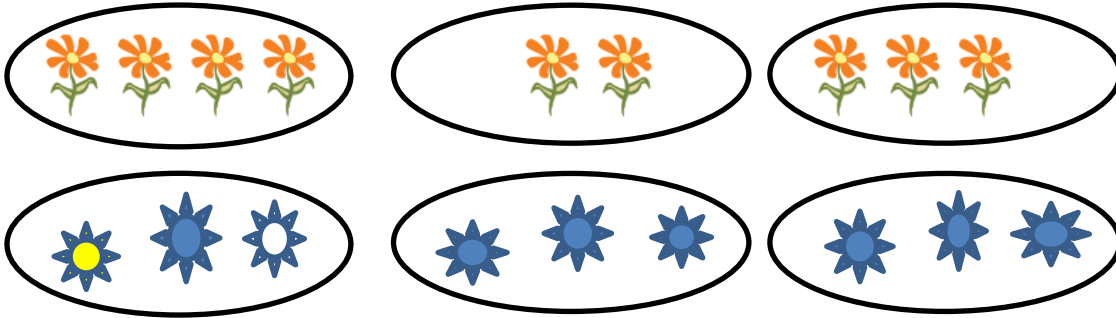
4 groups of \_\_\_\_\_ oranges

4. Redraw the 12 oranges into 3 equal groups.

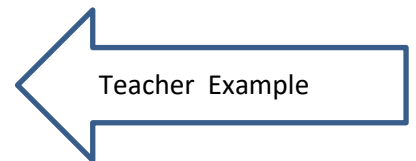


3 groups of \_\_\_\_\_ oranges

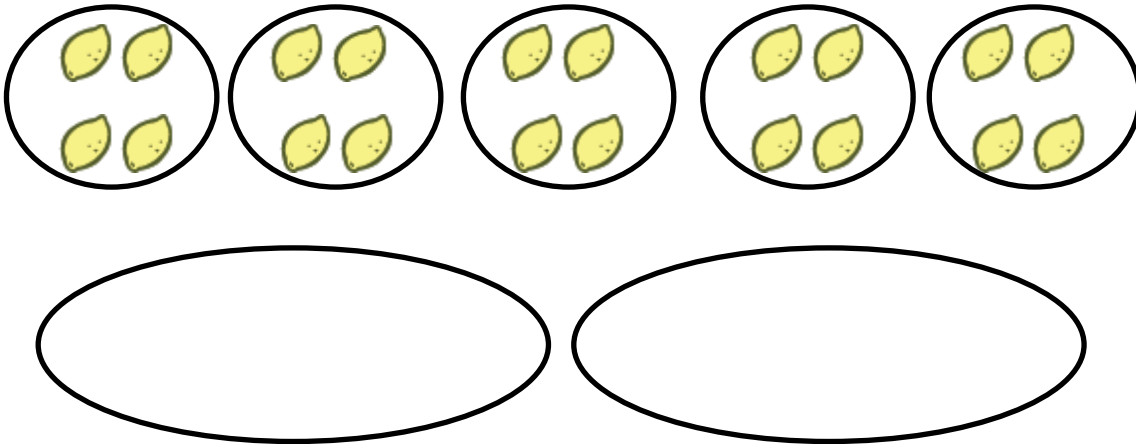
5. Redraw the flowers to make each of the 3 groups have an equal number.



3 groups of 3 flowers = 9 flowers.



6. Redraw the lemons to make 2 equal size groups.



2 groups of \_\_\_\_\_ lemons = \_\_\_\_\_ lemons.

Name \_\_\_\_\_

Date: May 12, 2020

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2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

**REPEATED ADDITION**  
Adding the same number  
(addend) over and over.

$$3 + 3 + 3 + 3 = 12$$

Barbara Kaplan, Ph.D.

## Module 6 Math Lesson 2

Write a **repeated addition** equation to show the number of objects in each group.

Then, find the total.



$$\underline{2} + \underline{2} + \underline{2} = \underline{6}$$

$$3 \text{ groups of } \underline{2} = \underline{6}$$

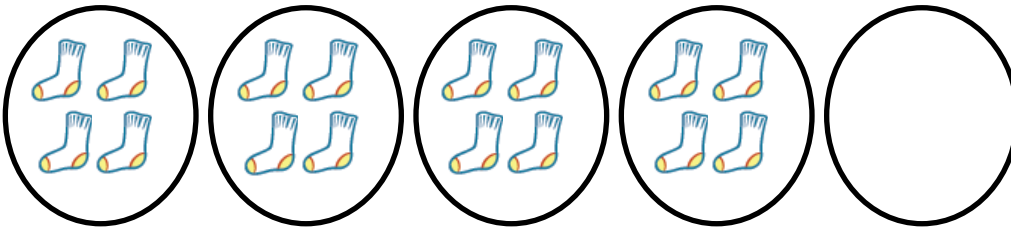
Teacher Example



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

$$4 \text{ groups of } \underline{\quad} = \underline{\quad}$$

1. Draw 1 more group of four. Then, write a repeated addition equation to match.



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

$$5 \text{ groups of } \underline{\quad} = \underline{\quad}$$

3. Draw 1 more group of three. Then, write a repeated addition equation to match.



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

$$\underline{\quad} \text{ groups of } 3 = \underline{\quad}$$

4. Draw 2 more equal groups. Then, write a repeated addition equation to match.



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

$$\underline{\quad} \text{ groups of } 2 = \underline{\quad}$$

5. Draw 3 groups of 5 stars. Then, write a repeated addition equation to match.



Name \_\_\_\_\_

Date: May 13, 2020

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# Anchor Chart

2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

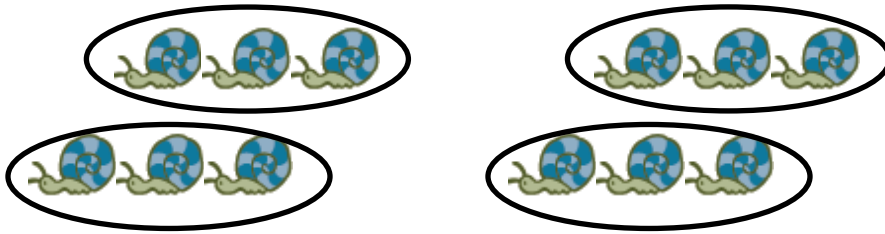
## REPEATED ADDITION

Adding the same number  
(addend) over and over.

$$3 + 3 + 3 + 3 = 12$$


Module 6 Lesson 3

Write a **repeated addition** equation to match the picture. Then, group the addends into pairs to show a more efficient way to add.

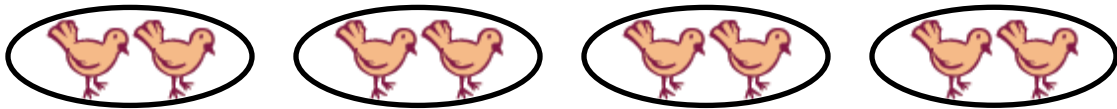


$$3 + 3 + 3 + 3 = 12$$

$$\begin{array}{r} \backslash \quad / \quad \backslash \quad / \\ 6 \quad + \quad 6 \quad = 12 \end{array}$$



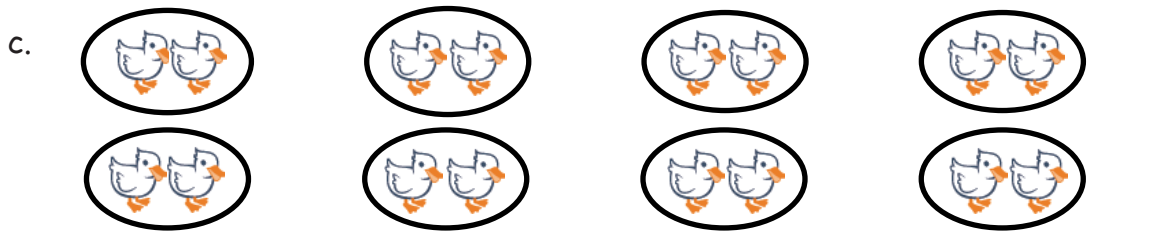
4 groups of 3 = 2 groups of 6



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

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

4 groups of        = 2 groups of



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

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

8 groups of  $\underline{\quad}$  = 4 groups of  $\underline{\quad}$

2. Write a repeated addition equation to match the picture. Then, group addends into pairs, and add to find the total.



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

$$\underline{\quad} + \underline{\quad} + 3 = \underline{\quad}$$

$$\underline{\quad} + 3 = \underline{\quad}$$



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

$$\underline{\quad} + 3 = \underline{\quad}$$

Name \_\_\_\_\_

Date: May 14, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

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# Anchor Chart

**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

## Arrays

### What is an array?

A set that shows equal groups in rows and columns

rows

columns

### Examples:

=

$3+3+3+3=12$   
 $4+4+4=12$   
 $4 \times 3=12$   
 $3 \times 4=12$

### Write an equation!

$3+3=6$   
 $2+2+2=6$   
 $3 \times 2=6$   
 $2 \times 3=6$

$3+3+3=9$   
 $3 \times 3=9$

$2+2+2+2=8$   
 $4+4=8$   
 $2 \times 4=8$   
 $4 \times 2=8$

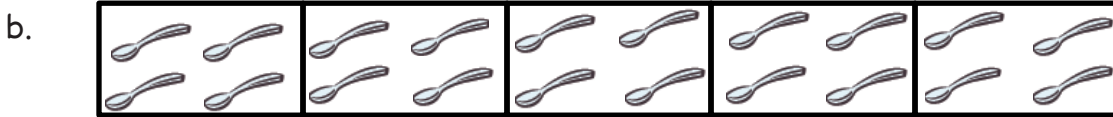
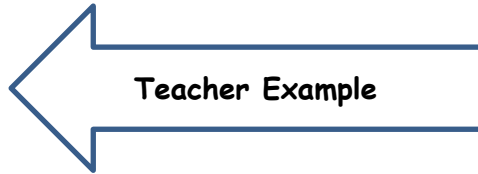
Module 6 Lesson 4

1. Write a repeated addition equation to find the total of each tape diagram.



$$2 + 2 + 2 + 2 = 8$$

$$4 \text{ groups of } 2 = 8$$



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

$$5 \text{ groups of } \underline{\quad} = \underline{\quad}$$



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

$$3 \text{ groups of } \underline{\quad} = \underline{\quad}$$



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

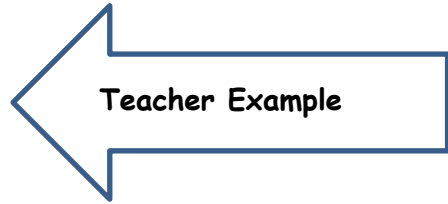
$$\underline{\quad} \text{ groups of } \underline{\quad} = \underline{\quad}$$

**Directions:** Draw a tape diagram to find the total.

a.  $3 + 3 + 3 + 3 = \underline{\hspace{2cm}}$



**=12**



**$3+3+3+3=12$**

b.  $4 + 4 + 4 = \underline{\hspace{2cm}}$

c. 5 groups of 2

d. 4 groups of 4



Name \_\_\_\_\_

Date: May 15, 2020

BCCS-Boys

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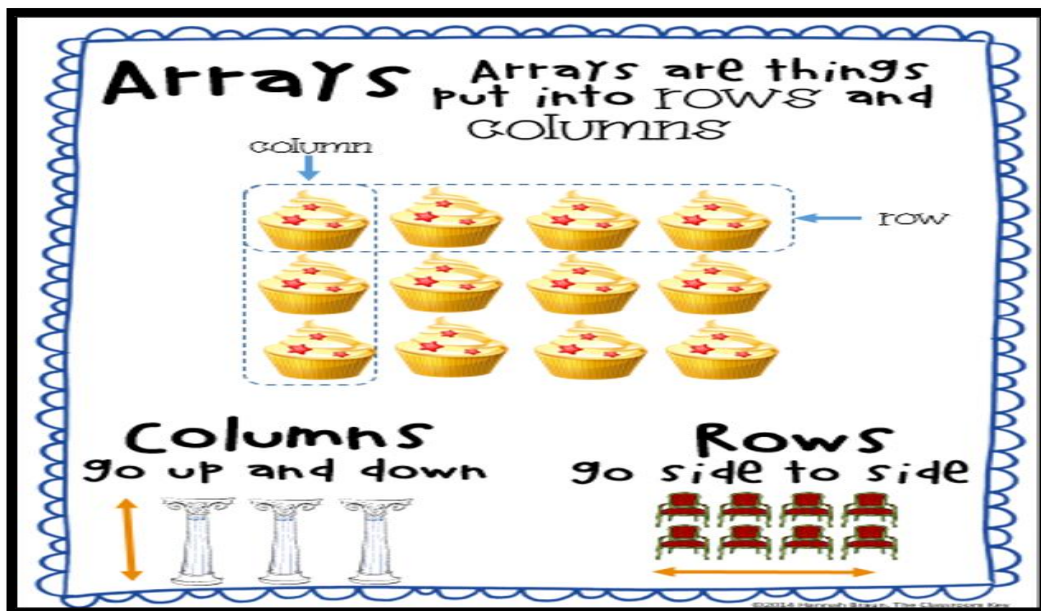
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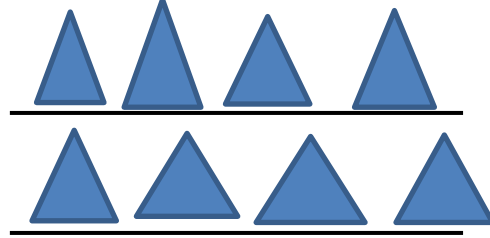
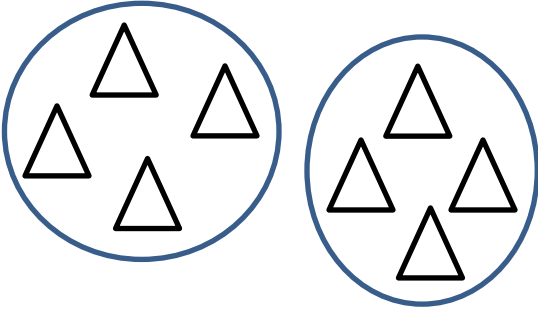


2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

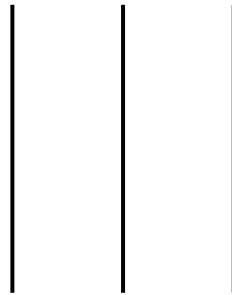
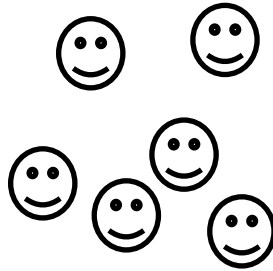
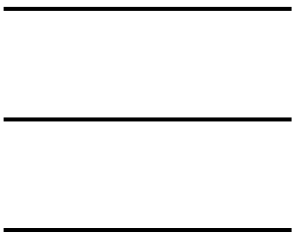


Module 6 Lesson 5

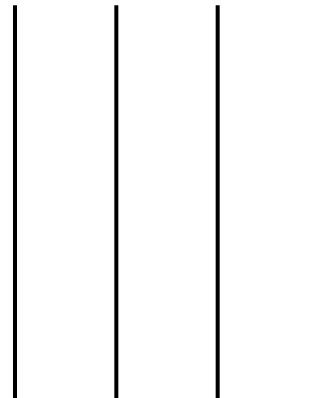
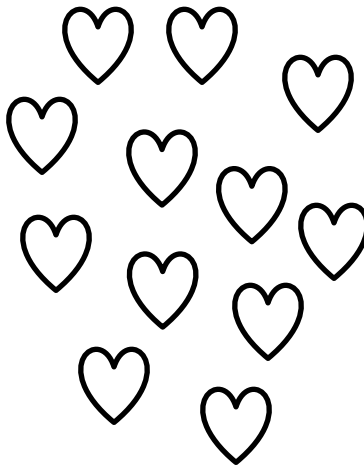
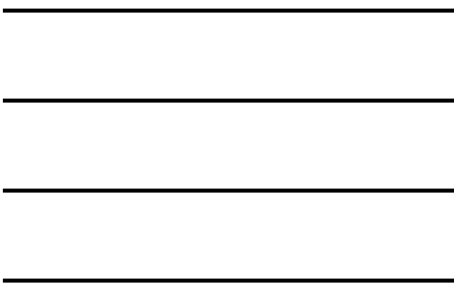
Directions: Circle groups of four. Then, draw the triangles into 2 equal rows.



Circle groups of two. Redraw the groups of two as rows and then as columns.

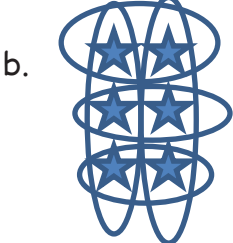
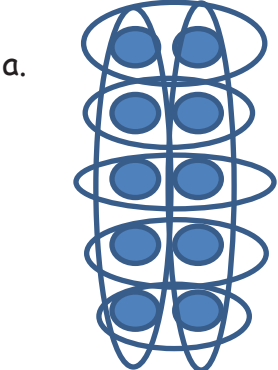


Circle groups of three. Redraw the groups of three as rows and then as columns.





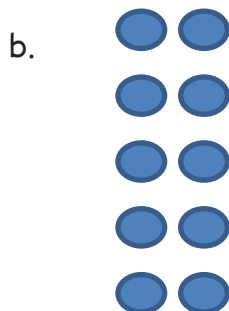
Count the objects in the arrays from left to right by rows and by columns. As you count, **circle the rows and then the columns.**



Draw an array with **15** triangles.

Show a **different** array with **15** triangles.

Count the objects in the arrays from left to right by rows and by columns. As you count, circle the rows and then the columns.



Redraw the circles and stars in *problem above* as columns of two.  
Draw an array with 15 triangles.

Show a different array with 15 triangles.

# Week 8: Scope & Sequence

Date	Standard	Description of Packet Assignment	Supplemental Online Resources
5/18	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to decompose arrays into rows and columns, and relate to repeated addition.	<b>Rows and Columns with Repeated Addition</b> <a href="https://www.youtube.com/watch?v=IRgKavUxvKY">https://www.youtube.com/watch?v=IRgKavUxvKY</a>
5/19	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to represent arrays and distinguish rows and columns using math drawings.	<b>Rows and Columns with Repeated Addition</b> <a href="https://www.youtube.com/watch?v=sIIROTvPKY&amp;t=309s">https://www.youtube.com/watch?v=sIIROTvPKY&amp;t=309s</a>
5/20	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to create arrays using square tiles with gaps.	<b>Rows and Columns with Repeated Addition</b> <a href="https://www.youtube.com/watch?v=IRgKavUxvKY">https://www.youtube.com/watch?v=IRgKavUxvKY</a> <a href="https://www.youtube.com/watch?v=sIIROTvPKY&amp;t=309s">https://www.youtube.com/watch?v=sIIROTvPKY&amp;t=309s</a>
5/21	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Solve word problems involving addition of equal groups in rows and columns.	Brain Pop Jr.: Repeated Addition User Name: ballston Password: scotties 1. Watch Video 2. Take the easy Quiz Challenge yourself with the hard Quiz  <a href="https://jr.brainpop.com/math/multiplicationanddivision/repeatedaddition/">https://jr.brainpop.com/math/multiplicationanddivision/repeatedaddition/</a>
5/22	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Use square tiles to compose a rectangle, and relate to the array model.	Watch this You Tube Video on Creating Equal Groups with Rows and Columns <a href="https://www.youtube.com/watch?v=wBzwAmPWHuM">https://www.youtube.com/watch?v=wBzwAmPWHuM</a>

Name \_\_\_\_\_

Date: May 18, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

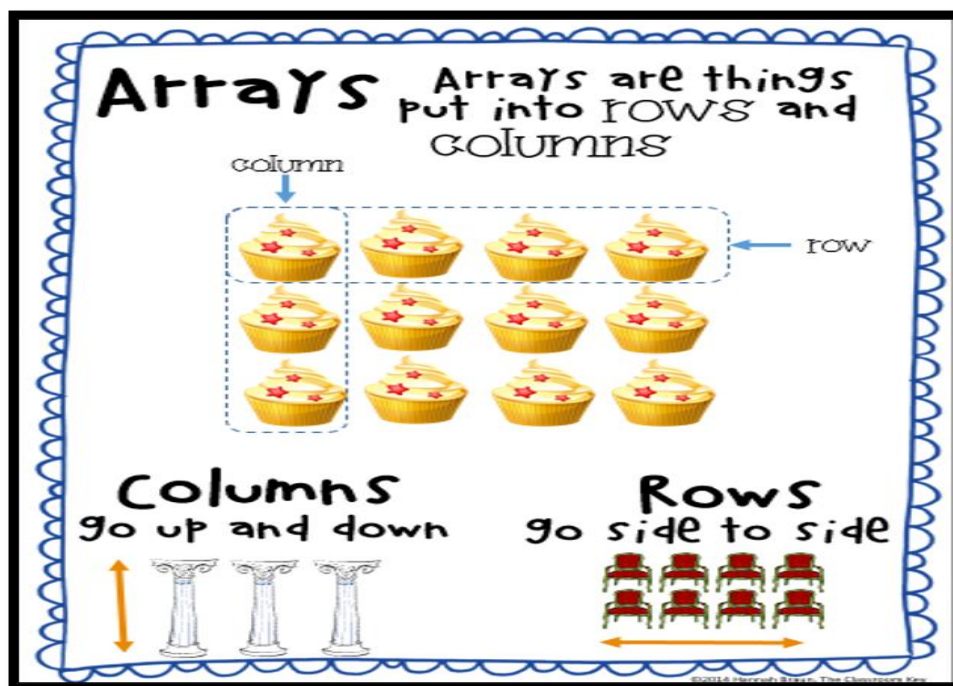
Parent Signature: \_\_\_\_\_

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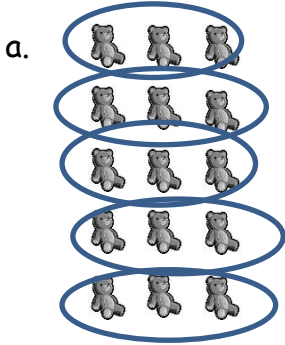
**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.



Module 6 Lesson 6

Directions: Complete each missing part describing each array.

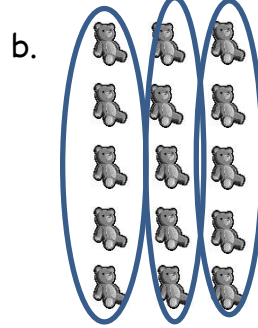
Circle rows.



**5 rows of 3 = 15**

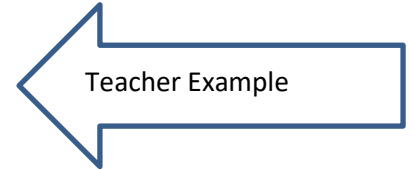
**3 + 3 + 3 + 3 + 3 = 15**

Circle columns.

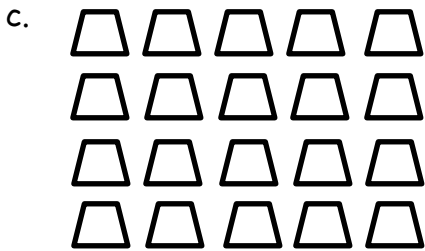


**3 columns of 5 = 15**

**5 + 5 + 5 = 15**



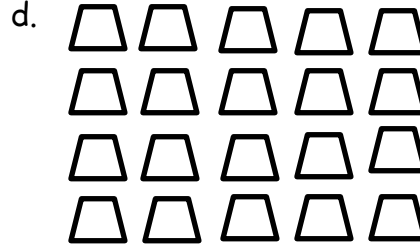
Circle rows.



4 rows of \_\_\_\_\_ = \_\_\_\_\_

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

Circle columns.



5 columns of \_\_\_\_\_ = \_\_\_\_\_

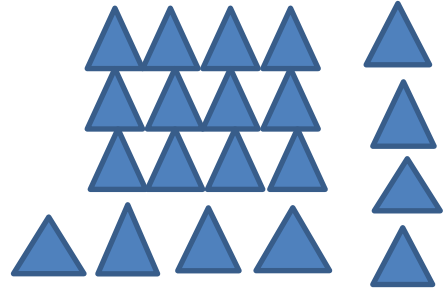
\_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ = \_\_\_\_

Directions: Use the array of triangles to answer the questions below.

a.  $3 \text{ rows of } 4 = 12$

b.  $4 \text{ columns of } 3 = 12$

c.  $4 + 4 + 4 = 12$



d. Add 1 more row. How many triangles are there now? **16**

e. Add 1 more column to the new array you made in 2(d). How many triangles are there now? **20**

Directions: Use the array of squares to answer the questions below.

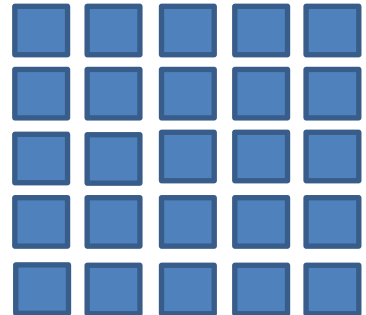
a. \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

b. \_\_\_\_\_ rows of \_\_\_\_\_ = \_\_\_\_\_

c. \_\_\_\_\_ columns of \_\_\_\_\_ = \_\_\_\_\_

d. Remove 1 row. How many squares are there now? \_\_\_\_\_

e. Remove 1 column from the new array you made in 3(d). How many squares are there now? \_\_\_\_\_



Name \_\_\_\_\_

Date: May 19, 2020

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**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

X		X		X		
X		X		X		
X		X		X		
X		X		X		
4	+	4	+	4	=	12

Module 6 Lesson 7

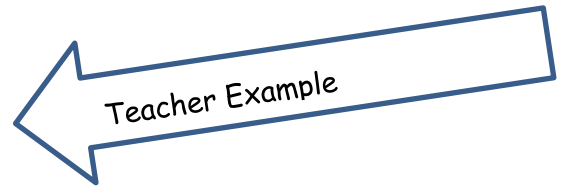
Directions: Read carefully the problems below and follow each step.

One row of an array is drawn below. Complete the array with X's to make **3 rows of 4**. Draw **horizontal lines** to separate the rows.

X X X X

XXXX

XXXX



Draw an array with X's that has **3 columns of 4**. Draw **vertical lines** to separate the columns. Fill in the blanks.

X X X

$$4 + 4 + 4 = 12$$

X X X

$$3 \text{ rows of } 4 = 12$$

X X X

$$3 \text{ columns of } 4 = 12$$

X X X

a. Draw an array of X's with 5 columns of three.

b. Draw an array of X's with 5 rows of three. Fill in the blanks below.

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

$$5 \text{ columns of three} = \underline{\quad}$$

$$5 \text{ rows of three} = \underline{\quad}$$



**Directions:** In the following problems, separate the rows or columns with horizontal or vertical lines.

Draw an array of X's with 4 rows of 3.

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$4 \text{ rows of } 3 = \underline{\hspace{2cm}}$$

Draw an array of X's with 1 more row of 3 than the array in Problem 3. Write a repeated addition equation to find the total number of X's.

Draw an array of X's with 1 less column of 5 than the array in Problem 4. Write a repeated addition equation to find the total number of X's.

Name \_\_\_\_\_

Date: May 20, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

Parent Signature: \_\_\_\_\_

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

arrays

a set that shows equal groups in rows and columns

rows - run

columns - hold up the church

3 rows

5 columns

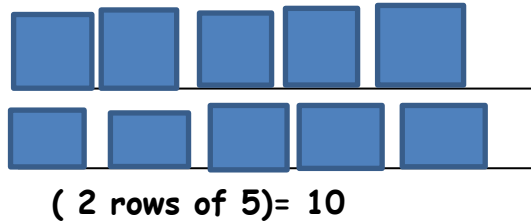
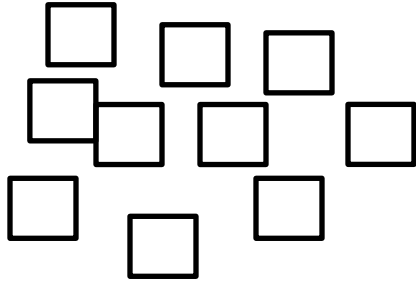
repeated addition:  $5 + 5 + 5 = 15$

or:  $3 + 3 + 3 + 3 + 3 = 15$

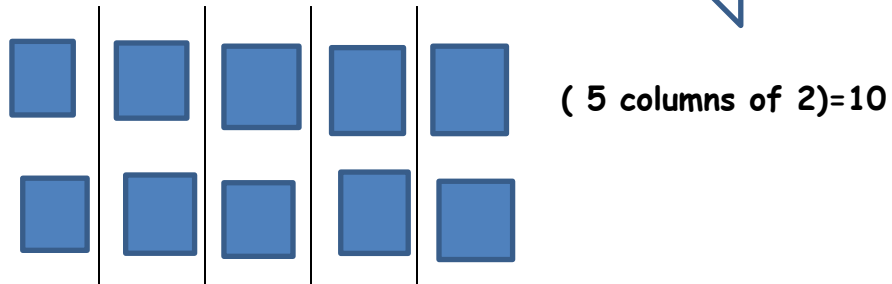
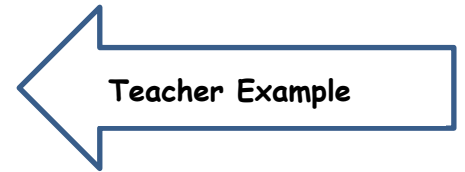
Module 6 Lesson 8

Directions: Follow the steps to each problem below and read each one carefully.

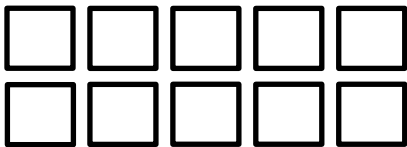
Create an array with the squares. ( Use rows or columns)



Create another array with the squares from the set above.

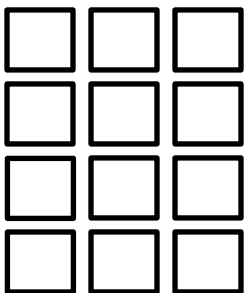


Use the array of squares to answer the questions below.



- a. There are \_\_\_\_ squares in each row.
- b. \_\_\_\_ + \_\_\_\_ = \_\_\_\_
- c. There are \_\_\_\_ squares in each column.
- d. \_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ + \_\_\_\_ = \_\_\_\_

Use the array of squares to answer the questions below.

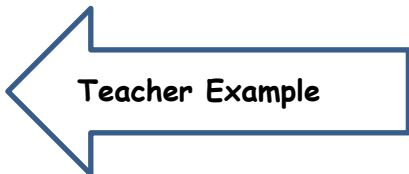


a. There are 3 squares in one row.

b. There are 4 squares in one column.

c.  $4 + 4 + 4 = 12$

d. 3 columns of 4 = 4 rows of 3 = 12 total



Draw an array with 8 squares that has 2 squares in each column.

Write a repeated addition equation to match the array.

Draw an array with 20 squares that has 4 squares in each column.

Write a repeated addition equation to match the array.

Draw a tape diagram to match your repeated addition equation and array.

Name \_\_\_\_\_

Date: May 21, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

Parent Signature: \_\_\_\_\_

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

**Arrays**

**What is an array?**  
A set that shows equal groups in rows and columns

columns

rows

**Examples:**


=

$3+3+3+3=12$   
 $4+4+4=12$   
 $4 \times 3=12$   
 $3 \times 4=12$

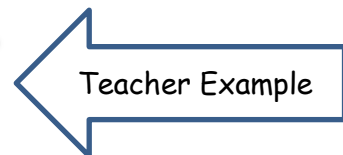
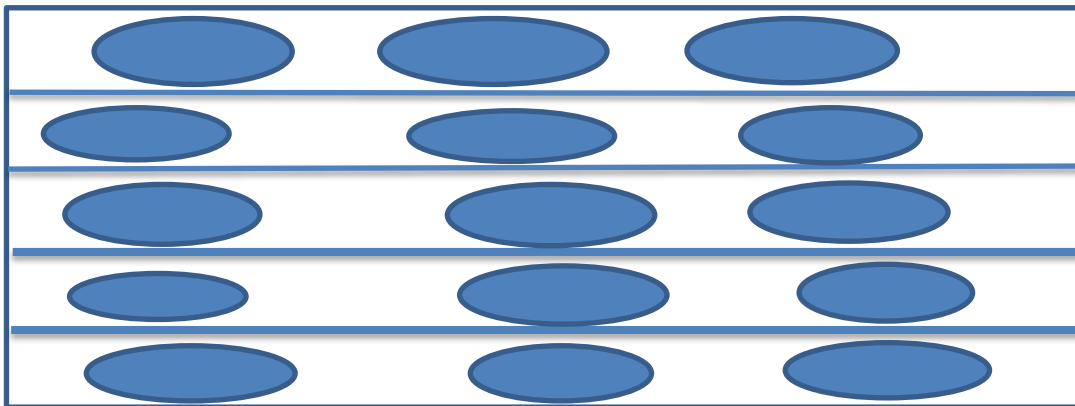
**Write an equation!**

	$3+3=6$
	$2+2+2=6$
	$3 \times 2=6$
	$2 \times 3=6$
	$3+3+3=9$
	$3 \times 3=9$
	$2+2+2+2=8$
	$4+4=8$
	$2 \times 4=8$
	$4 \times 2=8$

**Module 6 Lesson 9**

**Directions:** Draw an array for each word problem. Write a **repeated addition** equation to match each array.

Jason collected some rocks. He put them in **5 rows with 3 stones in each row**. How many stones did Jason have altogether? **Jason has 15 total rocks.**



Abby made **3 rows of 4 chairs**. How many chairs did Abby use?

There are **3 wires and 5 birds** sitting on each of them. How many birds in all are on the wires?

**Directions:** Draw a **tape diagram** for each word problem. Write a repeated addition equation to match each tape diagram.

Each of Maria's 4 friends has 5 markers. How many markers do Maria's friends have in all?

1. Maria also has 5 markers. How many markers do Maria and her friends have in all?

Draw a tape diagram and an array. Then, write a repeated addition equation to match.

2. In a card game, 3 players get 4 cards each. One more player joins the game. How many total cards should be dealt now?

Name \_\_\_\_\_

Date: May 22, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

Parent Signature: \_\_\_\_\_

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

**Partition**

- 1 separate into
- 2 rows  $\Rightarrow$  and columns  $\downarrow$
- 3 and
- 4 count the squares

There are \_\_\_\_\_ rows.  
There are \_\_\_\_\_ columns.  
There are \_\_\_\_\_ squares.

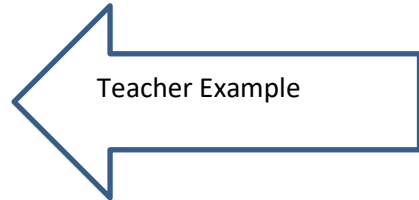
WHAT I have LEARNED



Module 6 Lesson 10

Directions: Use your **square tiles** to construct the following rectangles with no gaps or overlaps. Write a repeated addition equation to match each construction.

Construct a rectangle with **2 rows of 3** tiles.



Construct a rectangle with **2 columns of 3** tiles.



Construct a rectangle with **5 rows of 2** tiles.



Construct a rectangle with **5 columns of 2** tiles.



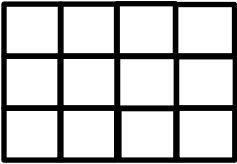
Construct a **rectangle of 9** tiles that has **equal rows and columns**.

---

Construct a rectangle of **16** tiles that has **equal rows and columns**.

---

What shape is the array pictured below? \_\_\_\_\_



Redraw the above shape with one **column removed** ( taken away) in the space below.

What shape is the array now? \_\_\_\_\_

## Week 9: Scope & Sequence

Date	Standards	Description of Packet	Supplemental Online Resources
5/25	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Use square tiles to compose a rectangle, and relate to the array model.	<p style="text-align: center;"><b>Creating Equal Groups with Rows and Columns</b></p> <p style="text-align: center;"><a href="https://www.youtube.com/watch?v=wBzwAmPWHuM">https://www.youtube.com/watch?v=wBzwAmPWHuM</a></p>
5/26	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Use math drawings to compose a rectangle with square tiles.	<p style="text-align: center;"><b>Creating Rows and Columns and its connection to multiplication</b></p> <p style="text-align: center;"><a href="https://www.youtube.com/watch?v=CtdcTDc buW0">https://www.youtube.com/watch?v=CtdcTDc buW0</a></p>
5/27	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Use square tiles to decompose a rectangle.	<p style="text-align: center;"><b>How to use and create Rows and Columns</b></p> <p style="text-align: center;"><a href="https://www.youtube.com/watch?v=WYDMn URrizw&amp;t=86s">https://www.youtube.com/watch?v=WYDMn URrizw&amp;t=86s</a></p>
5/28	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to use a pair of scissors or a ruler to partition a rectangle into same-size squares, and compose arrays with the squares.	<p style="text-align: center;"><b>How to use and create Rows and Columns</b></p> <p style="text-align: center;"><a href="https://www.youtube.com/watch?v=ZLpCh7N wjNo">https://www.youtube.com/watch?v=ZLpCh7N wjNo</a></p>
5/29	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends.	Scholars will be able to use math drawings to partition a rectangle with square tiles, and relate to repeated addition.	<p style="text-align: center;"><b>How to use and create Rows and Columns</b></p> <p style="text-align: center;"><a href="https://www.youtube.com/watch?v=WYDMn URrizw&amp;t=86s">https://www.youtube.com/watch?v=WYDMn URrizw&amp;t=86s</a></p> <p style="text-align: center;"><a href="https://www.youtube.com/watch?v=ZLpCh7N wjNo">https://www.youtube.com/watch?v=ZLpCh7N wjNo</a></p>

Name \_\_\_\_\_

Date: May 25, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

Parent Signature:

\_\_\_\_\_  
(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

## Arrays

**What is an array?**

A set that shows equal groups in rows and columns

rows

columns

**Examples:**

=

$3+3+3+3=12$   
 $4+4+4=12$   
 $4 \times 3=12$   
 $3 \times 4=12$

**Write an equation!**

$3+3=6$   
 $2+2+2=6$   
 $3 \times 2=6$   
 $2 \times 3=6$

$3+3+3=9$   
 $3 \times 3=9$

$2+2+2+2=8$   
 $4+4=8$   
 $2 \times 4=8$   
 $4 \times 2=8$

**Module 6 Lesson 11**

**Directions:** Use your square tiles to construct the following arrays with no gaps or overlaps. Write a repeated addition equation to match each construction.

1. a. Place **8** square tiles in a **row**.

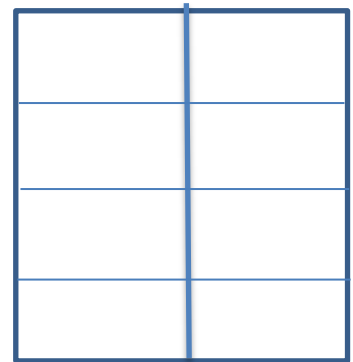
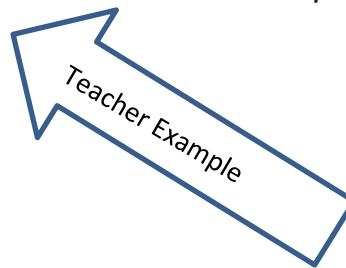


- b. Construct an **array** with the **8** square tiles.

- c. Write a **repeated addition** equation to match the new array.

**$4 + 4 = 8$  OR  $2 + 2 + 2 + 2 = 8$**

---



2. a. Construct an **array** with **12** squares.

- a. Write a **repeated addition** equation to match the array.

---

- c. **Rearrange** the **12** squares into a **different** array.

- d. Write a **repeated addition** equation to match the new array.

---

3. a. Construct an array with **20** squares.

b. Write a **repeated addition** equation to match the array.

\_\_\_\_\_

c. **Rearrange** the **20** squares into a **different** array.

d. Write a **repeated addition** equation to match the new array.

\_\_\_\_\_

4. Construct **2** arrays with **6** squares.

a. 2 rows of \_\_\_\_\_ = \_\_\_\_\_

b. 3 rows of \_\_\_\_\_ = 2 rows of \_\_\_\_\_

5. Construct **2** arrays with **10** squares.

a. 2 rows of \_\_\_\_\_ = \_\_\_\_\_

b. 5 rows of \_\_\_\_\_ = 2 rows of \_\_\_\_\_

Name \_\_\_\_\_

Date: May 26, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

Parent Signature: \_\_\_\_\_

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write and equation to express the total as a sum of equal addends

**arrays**

what is an array?  
a set that shows equal groups in rows and columns

write an equation!

examples:

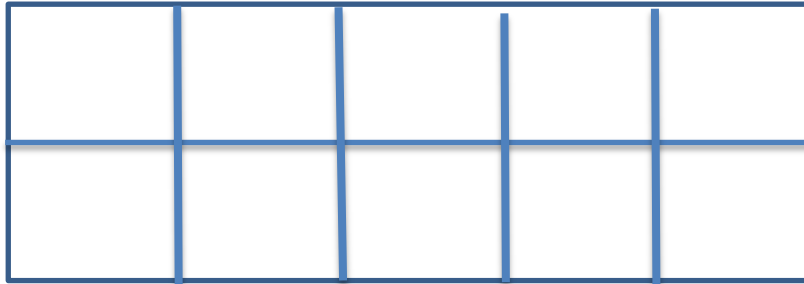
- 3 + 3 + 3 = 12
- 4 + 4 + 4 = 12
- 4 + 4 + 4 = 12
- 3 + 3 + 3 + 3 = 12
- 2 + 2 + 2 = 6
- 3 + 3 = 6
- 2 x 3 = 6
- 3 x 3 = 9
- 3 x 2 = 6
- 3 x 3 = 9
- 4 + 4 + 4 = 12
- 3 + 3 + 3 + 3 = 12
- 3 x 4 = 12
- 2 + 2 + 2 + 2 = 8
- 4 + 4 = 8
- 2 x 4 = 8
- 4 x 2 = 8

ROWS

COLUMNS

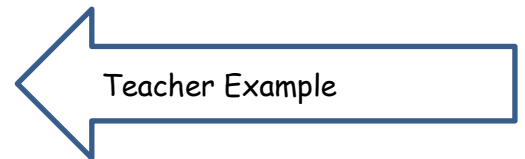
## Module 6 Lesson 12

1. Draw using square tiles to make an array with 2 rows of 5.



2 rows of 5 = 10

$$\underline{5} + \underline{5} = \underline{10}$$



2. Draw using square tiles to make an array with 4 columns of 3.

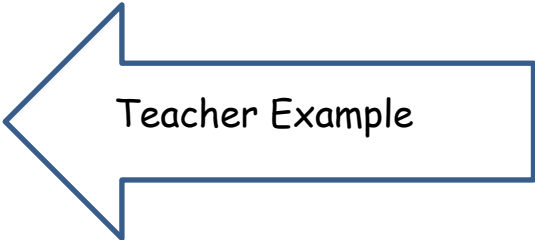
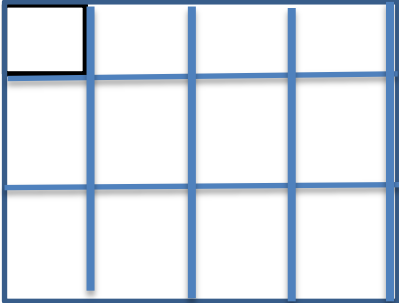
4 columns of 3 = \_\_\_\_\_

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



Complete the following arrays without gaps or overlaps. The first tile has been drawn for you.

3 rows of 4



5 columns of 3



5 columns of 4



Name \_\_\_\_\_

Date: May 27, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

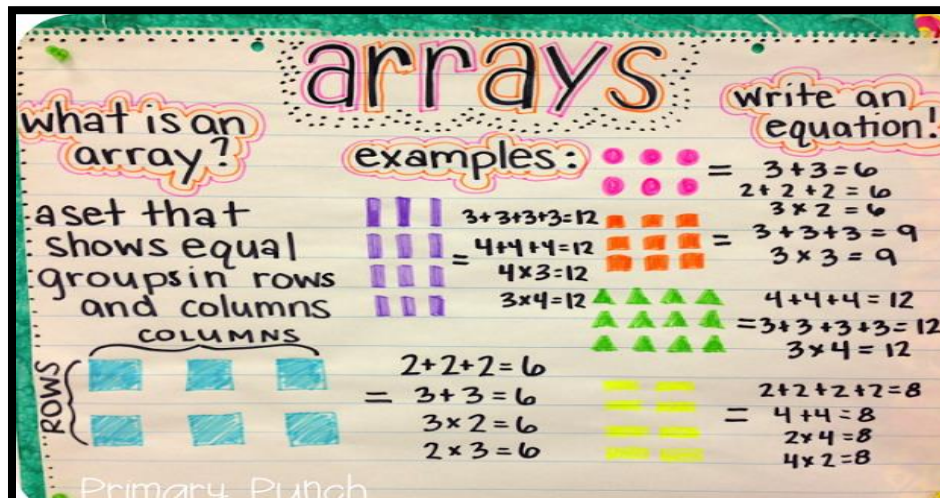
Parent Signature: \_\_\_\_\_

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends



## Module 6 Lesson 13

Use your square tiles to complete the steps for each problem.

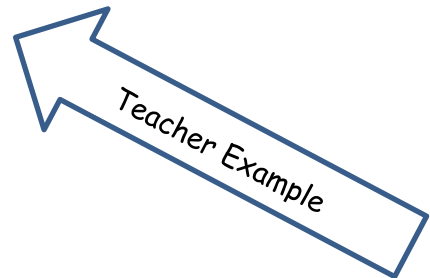
### Problem 1

Step 1: Construct a rectangle with 4 columns of 3

Step 2: Write a repeated addition sentence to match.



$$3 + 3 + 3 + 3 = 12$$



### Problem 2

Step 1: Construct a rectangle with 5 rows of 2.

Step 2: Write a repeated addition sentence to match.

### Problem 3

Step 1: Construct a rectangle with 5 columns of 3.

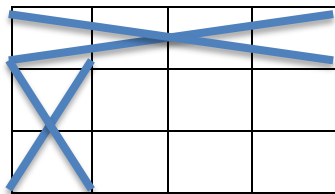
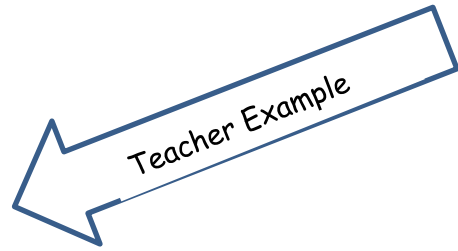
Step 2: Write a repeated addition sentence to match.

Use 12 square tiles to construct a rectangle with 3 rows.

a. 3 rows of 4 = 12

b. Remove 1 row. How many squares are there now? 8

c. Remove 1 column from the new rectangle you made in 4(b). How many squares are there now? 6



Use 20 square tiles to construct a rectangle.

a. \_\_\_\_\_ rows of \_\_\_\_\_ = \_\_\_\_\_

b. Remove 1 row. How many squares are there now? \_\_\_\_\_

c. Remove 1 column from the new rectangle you made in 5(b). How many squares are there now? \_\_\_\_\_

Use 16 square tiles to construct a rectangle.

a. \_\_\_\_\_ rows of \_\_\_\_\_ = \_\_\_\_\_

b. Remove 1 row. How many squares are there now? \_\_\_\_\_

c. Remove 1 column from the new rectangle you made in 6(b). How many squares are there now? \_\_\_\_\_

Name \_\_\_\_\_

Date: May 28, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

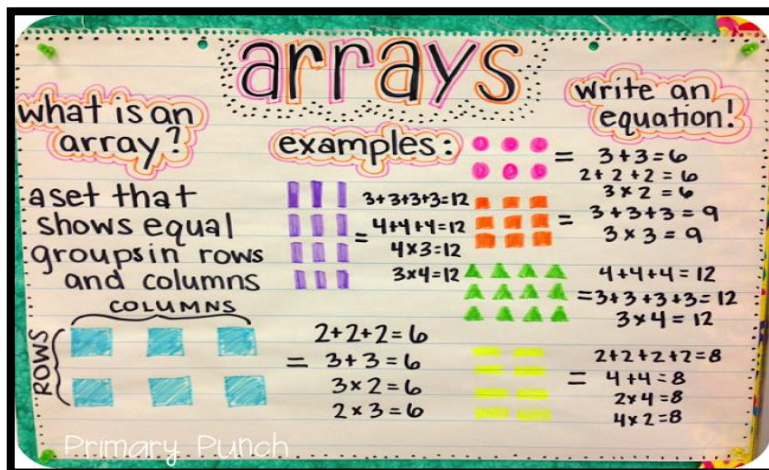
Parent Signature:

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

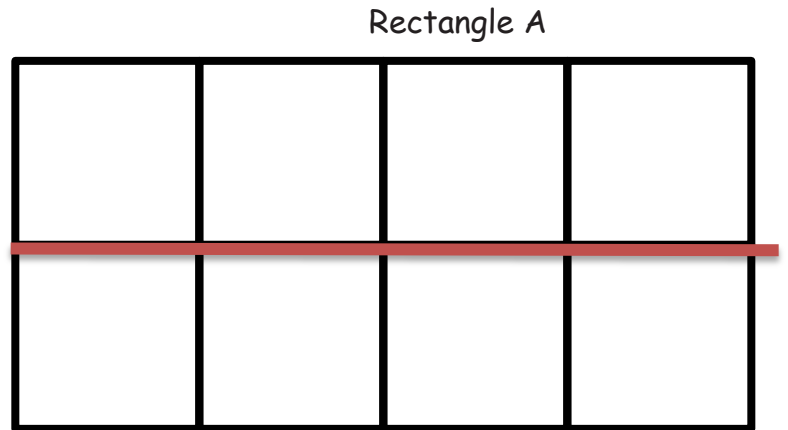


## Module 6 Lesson 14

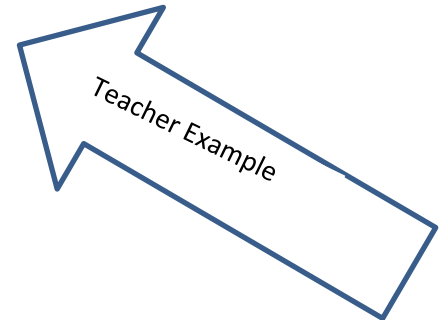
**Directions:** Cut out Rectangles A, B, and C. Then, cut according to directions. Answer each of the following using Rectangles A, B, and C on page 51.

Cut out each row of **Rectangle A**.

- Rectangle A has 2 rows.
- Each row has 4 squares.
- 2 rows of 4 = 8
- Rectangle A has 8 squares.



- Cut out each column of **Rectangle B**.
  - Rectangle B has \_\_\_\_\_ columns.
  - Each column has \_\_\_\_\_ squares.
  - \_\_\_\_\_ columns of \_\_\_\_\_ = \_\_\_\_\_
  - Rectangle B has \_\_\_\_\_ squares.



2. Cut out each square from both **Rectangles A and B**.
- Construct a new rectangle using all 16 squares.
  - My rectangle has \_\_\_\_\_ rows of \_\_\_\_\_.
  - My rectangle also has \_\_\_\_\_ columns of \_\_\_\_\_.
  - Write two repeated addition number sentences to match your rectangle.
3. Construct a new array using the **24 squares from Rectangles A, B, and C**.
- My rectangle has \_\_\_\_\_ rows of \_\_\_\_\_.
  - My rectangle also has \_\_\_\_\_ columns of \_\_\_\_\_.
  - Write two repeated addition number sentences to match your rectangle.

Extension: Construct another array using the squares from **Rectangles A, B, and C**.

- My rectangle has \_\_\_\_\_ rows of \_\_\_\_\_.
- My rectangle also has \_\_\_\_\_ columns of \_\_\_\_\_.
- Write two repeated addition number sentences to match your rectangle.

Name \_\_\_\_\_

Date: May 29, 2020

BCCS-Boys

College: NYU/Cornell /Columbia

Parent Signature: \_\_\_\_\_

(Parent signature is proof that parent reviewed work with scholar)

Parent/Scholar Notes: These are notes that can/should be shared with scholar's teacher	
Today my scholar was successful with....	Today my scholar struggled with understanding...



**2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends

RECTANGULAR ARRAYS

A rectangular array is an arrangement of objects into rows and columns that form a rectangle.

- Each row has the same number of objects.
- Each column has the same number of objects.

ROWS ←

Columns

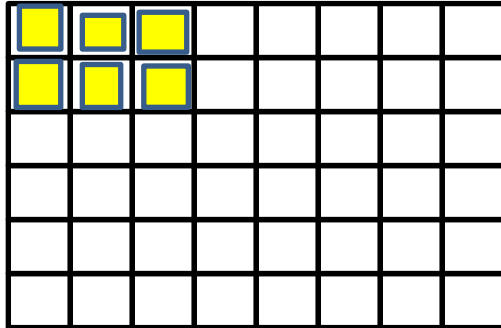
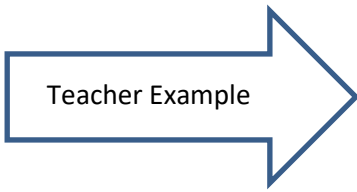
This array has 3 rows with 5 dots each and 5 columns with 3 dots each.

A multiplication number model can represent an array.  $3 \times 5 = 15$  -OR-  $5 \times 3 = 15$



**Module 6 Lesson 15**

Shade in an array with **2 rows of 3**.

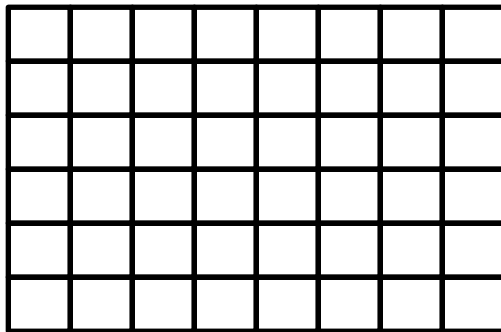


Write a repeated addition equation for the array.

**$3 + 3 = 6$**

---

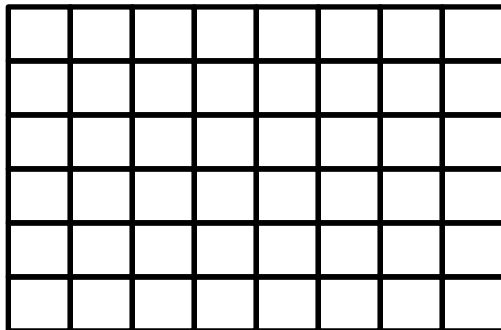
Shade in an array with **4 rows of 3**.



Write a repeated addition equation for the array.

---

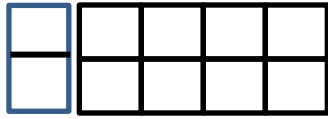
Shade in an array with **5 columns of 4**.



Write a repeated addition equation for the array.

---

Directions: Draw **one more column of 2** to make a new array.



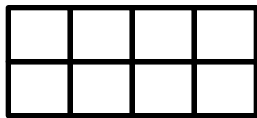
Teacher Example

Write a repeated addition equation for the new array.

$$2 + 2 + 2 + 2 + 2 = 10$$

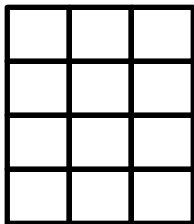
---

Draw **one more row of 4** and then one more column to make a new array.



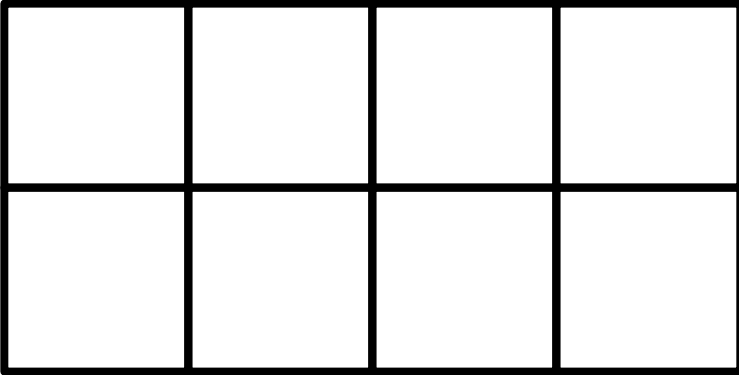
Write a repeated addition equation for the new array.

Draw **one more row and then two more columns** to make a new array.

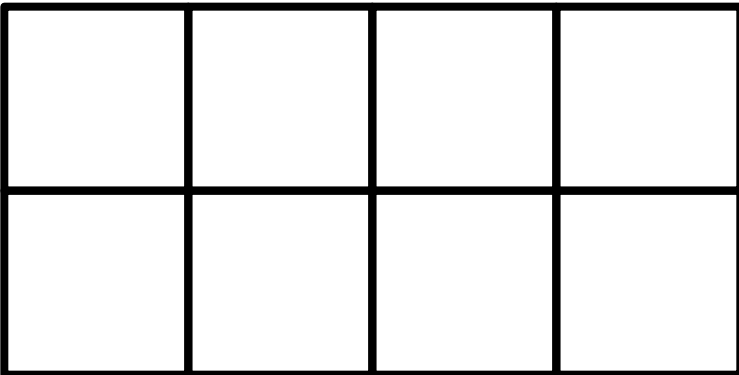


Write a repeated addition equation for the new array.

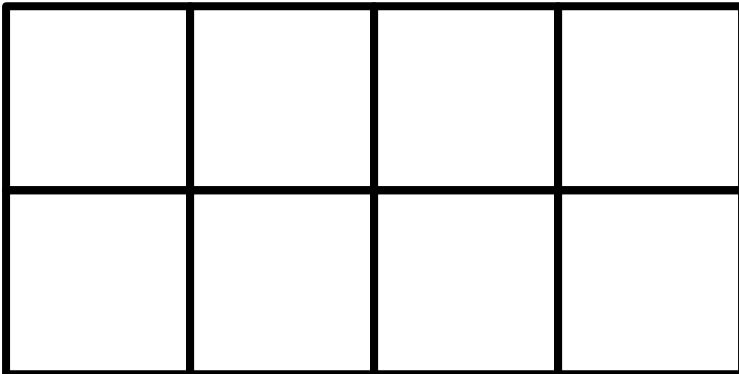
Rectangle A



Rectangle B



Rectangle C



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