Helping With Math

Expressing the Sum of Numbers Using Rectangular Array

GRADE 2

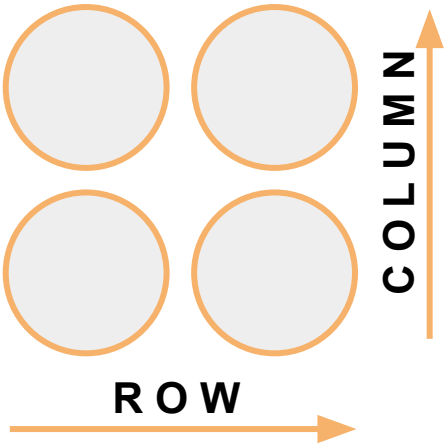
The arrangement of objects into rows and columns which forms a rectangle is called a rectangular array. Addition can be easily learned through the use of rectangular array.

It's Math time! Get your pencils and papers!

Addition (+) is finding the total of two or more number when combined together. The answer to the equation of addition is called "sum".

Examples: 2 + 2 = 4

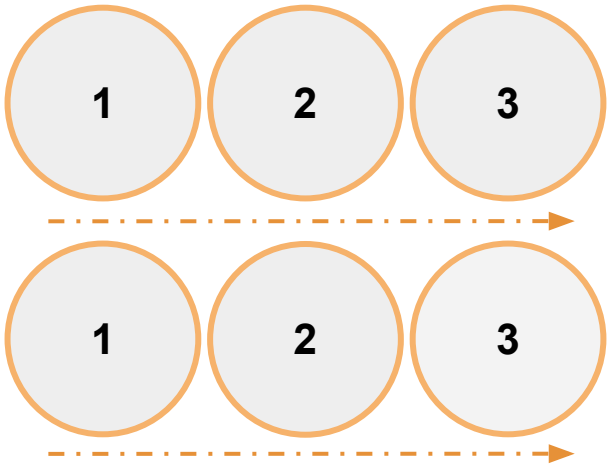
PROCESS

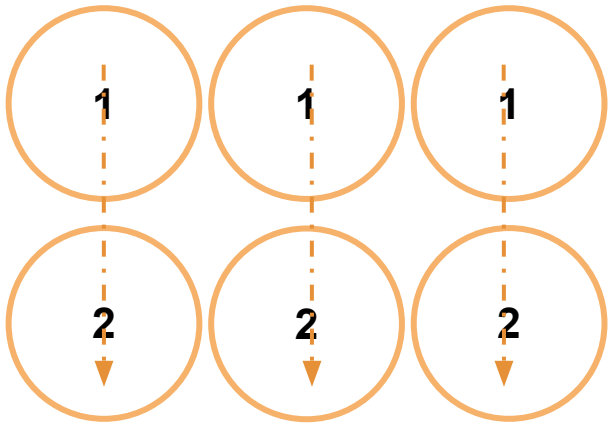


This is an example of a Rectangular Array. A rectangular array can be composed of different kinds of objects as long as it still forms a rectangle.

The rectangular array should have equal number of objects in its rows and columns.

There are two ways to use the array for Addition.





1. Count the number of objects in each row.

2. Add the total number of objects in each row.

Example:
3 + 3 = 6

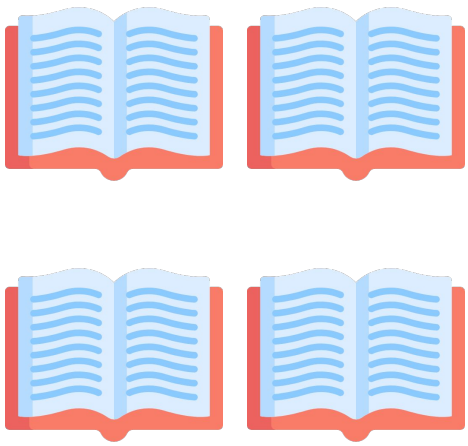
1. Count the number of objects in each column.

2. Add the total number of objects in each column.

Example:
2 + 2 + 2 = 6

PRACTICE TIME!

There are two equations that can be formed using the rectangular array. Write them down.



ROW:

3 + 3 = 6

COLUMN:

2 + 2 + 2 = 6

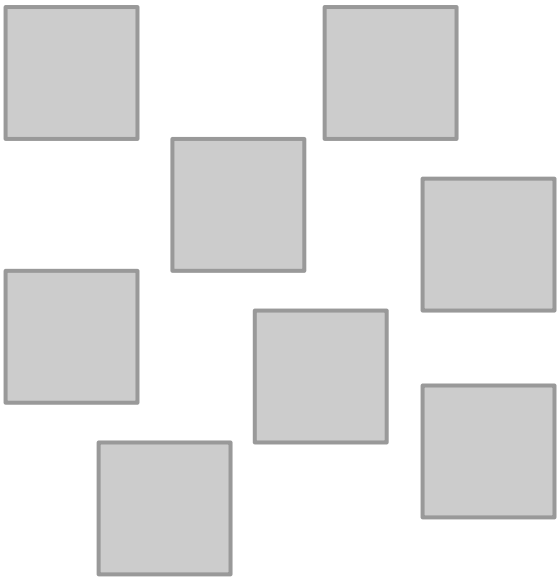
These are equations formed from one rectangular array. Draw circles on the space provided.

TABLE OF ACTIVITIES

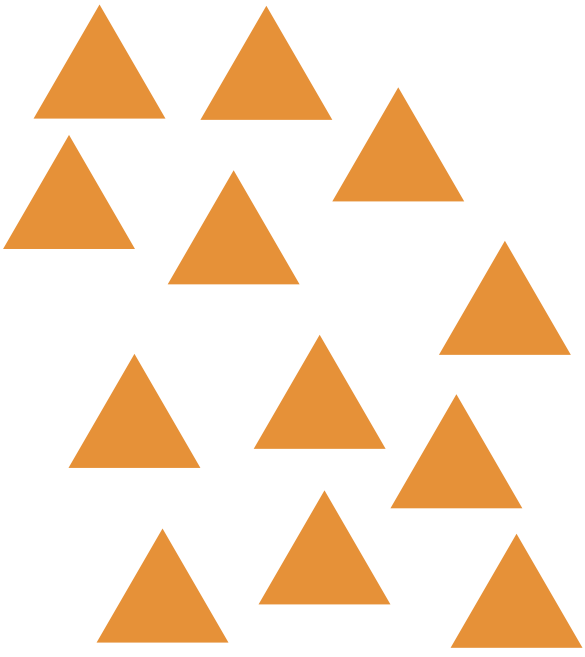
1. Squares and Triangles
2. Show and Tell
3. Your Favorite Pet
4. Different Fruits
5. Choose Your Sport
6. Flower Planting
7. Here are My Crayons
8. Draw the Shapes
9. Recess!
10. Last Subject

SQUARES AND TRIANGLES

Design your notebooks for your math class with these squares and triangles. Arrange them into rectangular arrays with the instructions given below.



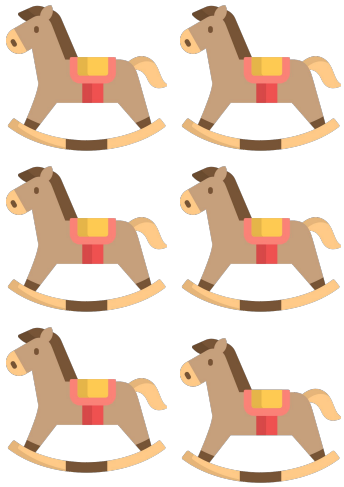
Make a rectangular array using the squares with 2 columns of 4.



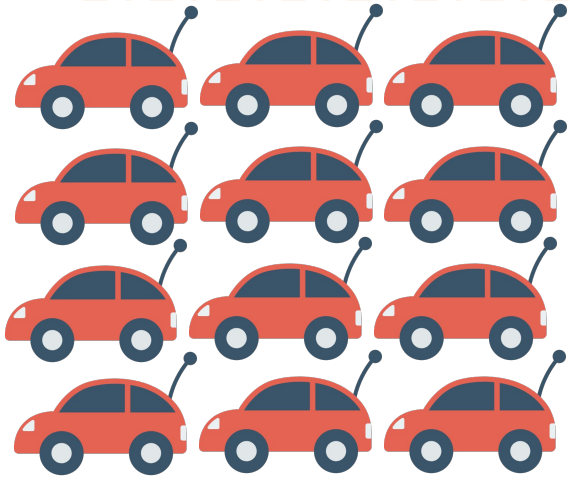
Make a rectangular array using the triangles with 4 rows of 3.

SHOW AND TELL

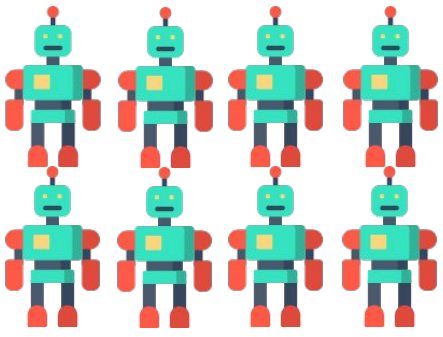
It is show and tell time! Bring your favorite toys to class. But before we start the class, check all the boxes of the appropriate equations for the rectangular arrays.



☐ 3 + 2 = 5	☐ 2 + 2 + 2 = 6
☐ 3 + 3 = 6	☐ 2 + 2 = 4



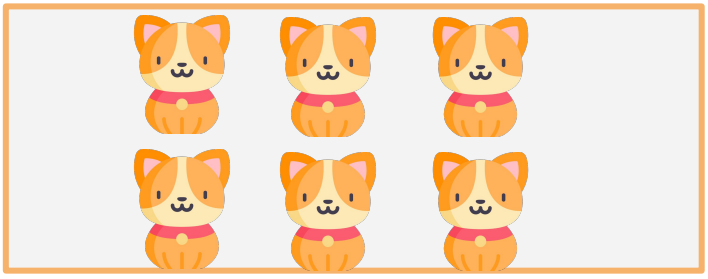
☐ 3 + 3 + 3 + 3 = 12	☐ 4 + 4 + 4 = 12
☐ 4 + 4 = 8	☐ 6 + 6 = 12

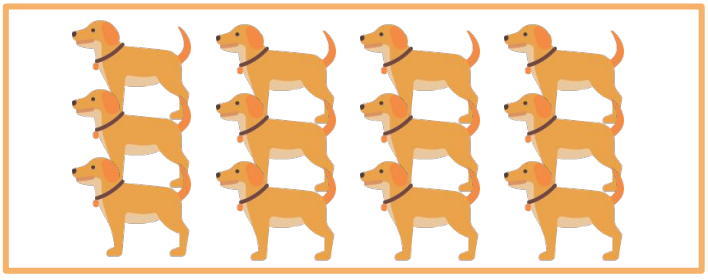


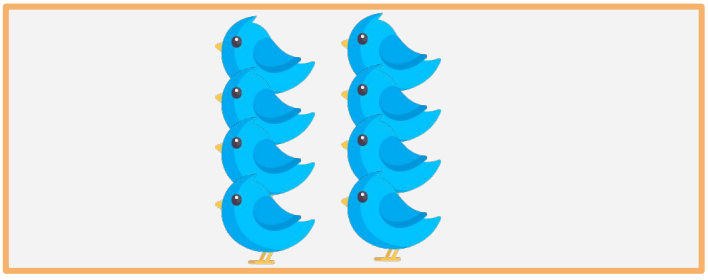
☐ 2 + 2 + 2 = 6	☐ 4 + 4 = 8
☐ 2 + 2 +2 +2 = 8	☐ 4 + 2 = 6

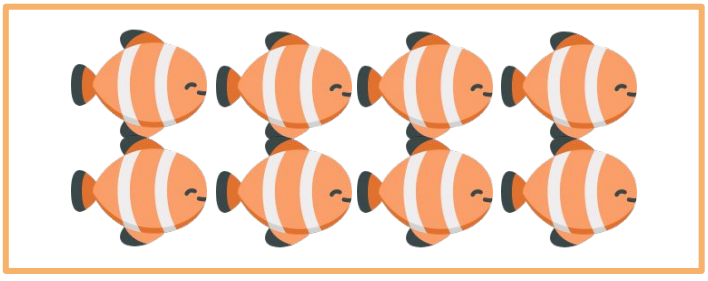
YOUR FAVORITE PET

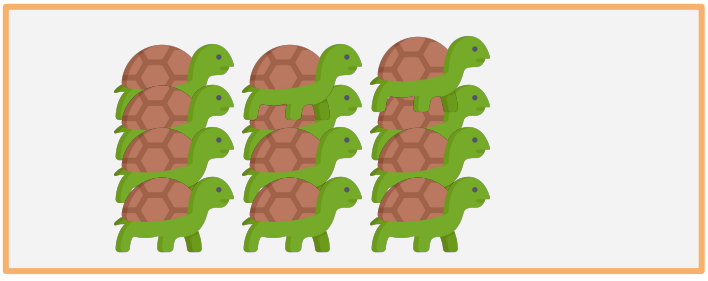
Bring your favorite pet to school. Before you enter the school, draw a line to the equation that matches the rectangular array. Count the rectangular array by rows.











2 + 2 + 2 + 2 = 8

4 + 4 = 8

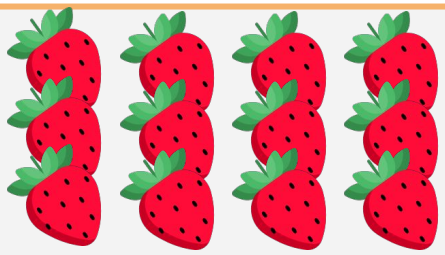
3 + 3 = 6

3 + 3 + 3 + 3 = 12

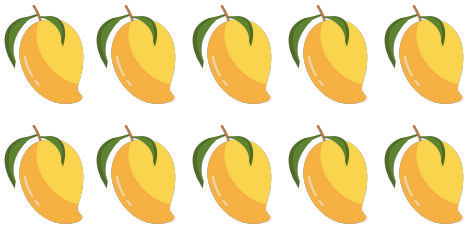
4 + 4 + 4 = 12

DIFFERENT FRUITS

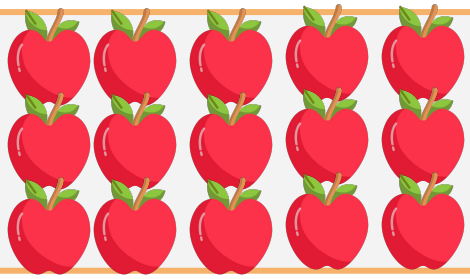
The kinds of fruits are the topic in your science class. Participate in your class by identifying if the following rectangular arrays are equal to the given equations. Write T if it is true, and F if is false.



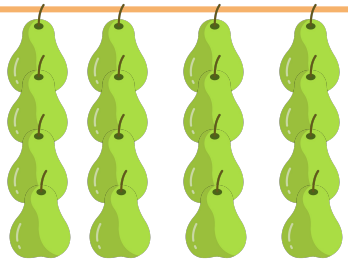
$3 + 3 + 3 + 3 = 12$



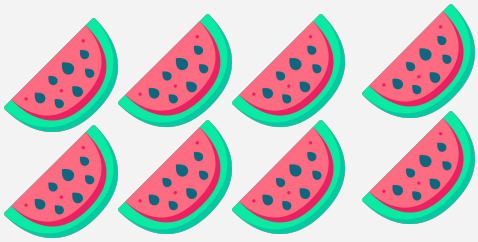
$5 + 5 = 10$



$3 + 3 + 3 = 9$



$4 + 4 + 4 = 12$

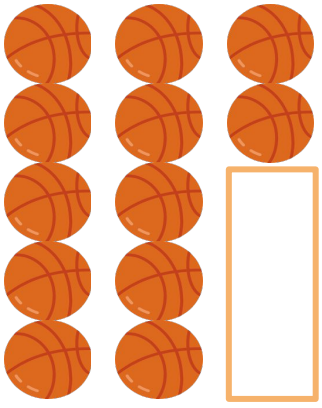


$4 + 4 = 8$

CHOOSE YOUR SPORT

It's sports time! Choose which sport to play by completing the rectangular arrays below as needed. No need to copy the balls, you may just draw additional circles on the spaces provided.

1.

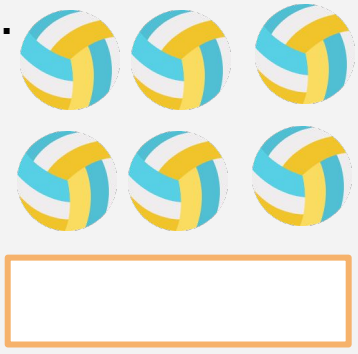


5 + 5 + 5 = 15

Or

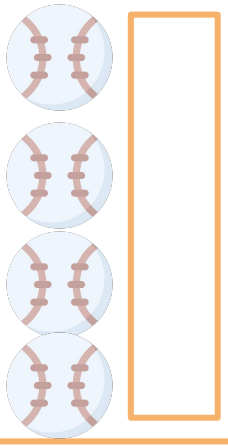
3 + 3 + 3 + 3 + 3 = 15

2.



3 + 3 + 3 = 9

3.

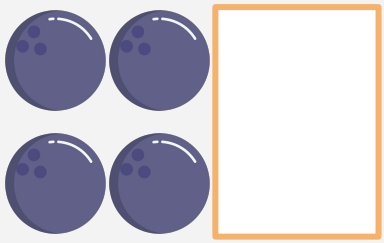


4 + 4 = 8

Or

2 + 2 + 2 + 2 = 8

4.

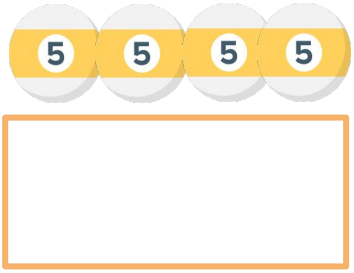


4 + 4 = 8

Or

2 + 2 + 2 + 2 = 8

5.

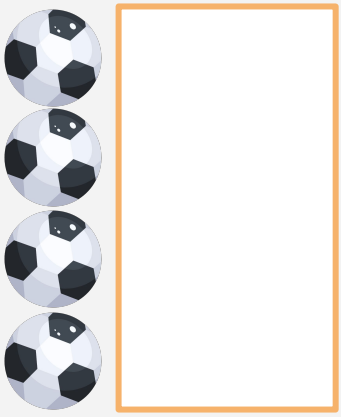


4 + 4 + 4 = 12

Or

3 + 3 + 3 + 3 = 12

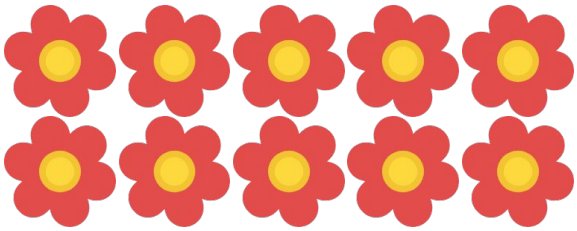
6.



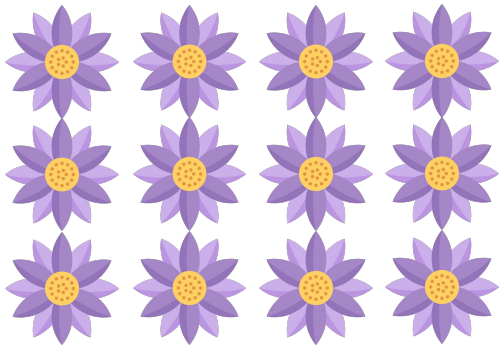
4 + 4 + 4 + 4 = 16

FLOWER PLANTING

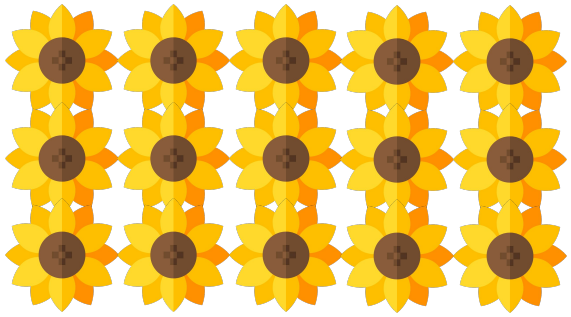
You have a planting activity in school. To get the seeds, provide the equivalent equations for the rectangular arrays given.



ROW **COLUMN**



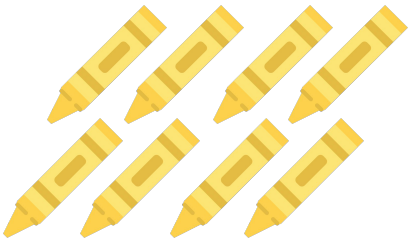
ROW **COLUMN**

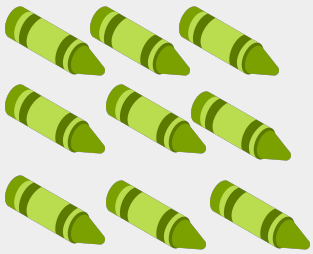


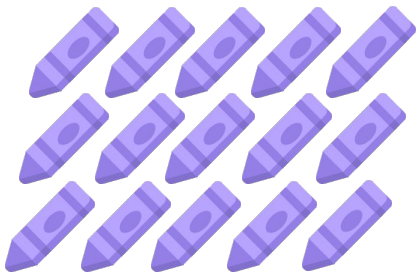
ROW **COLUMN**

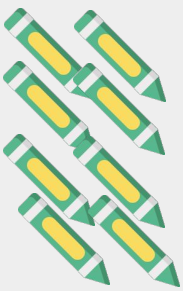
HERE ARE MY CRAYONS

Arts subject is coming up. Prepare your crayons. Encircle all columns and write down the equivalent equation for the columns of the rectangular array.









DRAW THE SHAPES

Your teacher needs you to draw different shapes. Use these shapes to create the rectangular arrays equivalent to the equations given below.

ROW: 3 + 3 + 3 = 9
COLUMN: 3 + 3 + 3 = 9

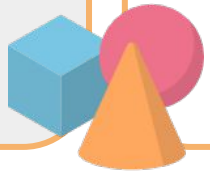
ROW: 3 + 3 + 3 + 3 = 12
COLUMN: 4 + 4 + 4 = 12

ROW: 2 + 2 + 2 + 2 = 8
COLUMN: 4 + 4 = 8

ROW: 4 + 4 + 4 + 4 = 16
COLUMN: 4 + 4 + 4 + 4 = 16

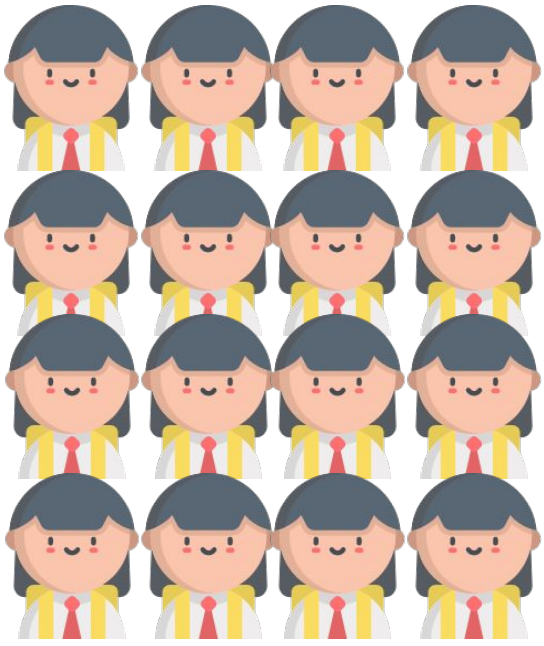
ROW: 2 + 2 + 2 + 2 + 2 = 10
COLUMN: 5 + 5 = 10

ROW: 3+ 3 + 3 + 3 + 3 = 15
COLUMN: 5 + 5 + 5 = 15



RECESS!

The bell rang which means it's already break time! Find your friends by answering what is being asked below. Use the rectangular arrays beside the rounded rectangles.



1. __**4**___ rows of __**4**__

2. _____ columns of _____

3. Write down the equation based on rows.

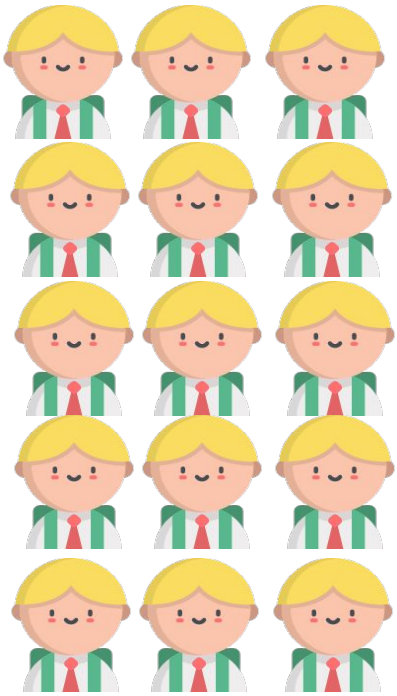
4. Add 1 more column. Show the new equation.

1. _____ rows of ____

2. __**3**__ columns of __5__

3. Write down the equation based on columns.

4. Add 1 more row. Show the new equation.



LAST SUBJECT

It is almost dismissal time. The last activity for the class is to briefly answer the questions below in your own words. Write down your answers on the spaces provided.

What is a rectangular array?

In your own words, how do you use a rectangular array for Addition?

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