Classwork 19

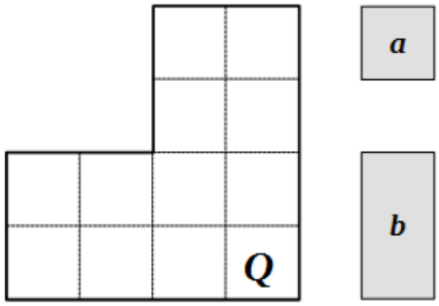
NEW MATERIAL

1. Look at measures a and b the shape ***Q*** and.

How many times does measure ***a*** fit in shape ***Q***? _____

How many times does measure ***b*** fit in shape ***Q***? _____

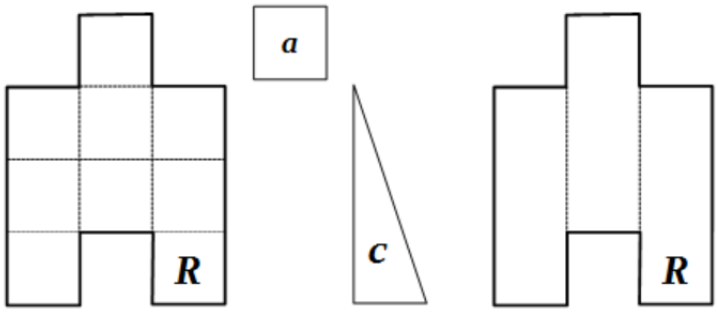
We write: ***Q*** = ___***a*** or ***Q*** = ___***b***

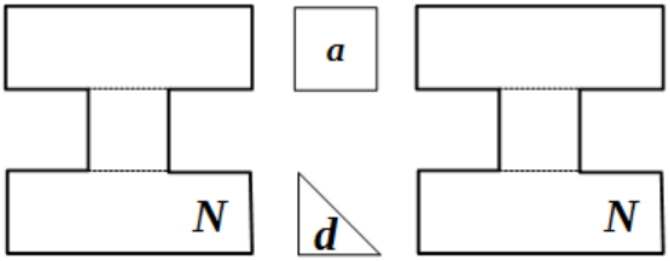


2. Measure the shapes below with provided measures:

R = _____ ***a***

R = _____ ***c***





N = _____ ***a***

N = _____ ***d***

What are you trying to find in the exercise above?

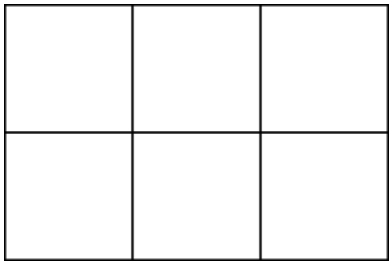
Does it matter what units of measure do we use?

Area and units of area

Area is a measure of how much surface is covered by a particular object or figure. The square with a unit side is used as a unit of measure for area.

Every unit of **length** has a corresponding unit of area, namely the area of a square with the given **side length**. Thus areas can be measured in square meters (m^2), square centimeters (**cm^2**), **square millimeters** (mm^2), square kilometers (km^2), square feet (ft^2), square yards (yd^2), square miles (mi^2), and so forth

Here is a rectangle that is 2 units wide and 3 units long and has an area (A) of 6 square units. It can be calculated in two ways:



a) $2 \times 3 = 6$ b) $3 \times 2 = 6$

3.

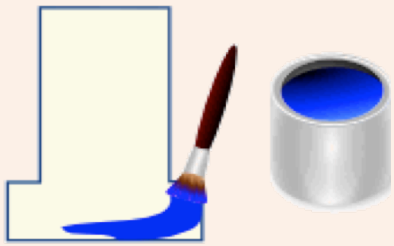
If the unit length is 1 cm, then the area of a single square will be 1 cm × 1 cm = 1 cm^2

Express in cm^2

1 dm = _____cm	1m = _____dm = _____cm
1 cm × 1 cm = 1 cm^2 1 dm^2 = 10 cm × 10 cm = 100 cm^2	1m^2 = 10dm x 10dm =100 dm^2 1m^2 =100cm x 100cm =10,000 cm^2
5 dm^2 = _____ cm^2 3 dm^2 = _____ cm^2 300 cm^2 = _____ dm^2 2 dm^2 = _____ cm^2 800 cm^2 = _____ dm^2	2 m^2 = _____ dm^2 300 dm^2 = _____ m^2 500 dm^2 = _____ m^2 7 m^2 = _____ cm^2

7 dm^2 = _____ cm^2	

Area is the size of a figure. It helps to imagine **how much paint** would cover the shape.



4.

a) A gardener builds a flowerbed that is 6 meters long and three meters wide. What is the area of the flowerbed? _____

b) Mr. Smith wants to tile the kitchen floor. How many one-meter square tiles will he need if his kitchen is 3 m long and 2 m wide? _____

c) Lisa's bedroom is 6 meters long and 4 meters wide. How much carpet will Lisa need to cover the floor of her bedroom? _____

d) Find the perimeter and area of a rectangle with width 6cm and length 10 cm.

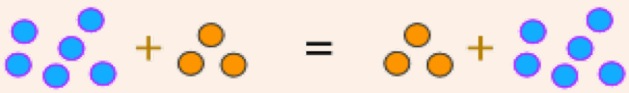
_____

_____

The Commutative property of multiplication says that when two numbers multiplied together, the product is the same regardless of the order of multiplicands.

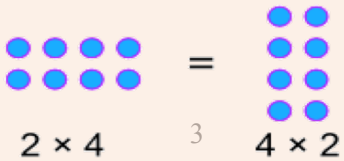
When we add:

a + b = b + a



When we multiply:

a × b = b × a



5. Use the commutative property of multiplication to find missing numbers:

$3 \times 1 = 1 \times \ = \_\_\_\_\_$ $5 \times 10 = \ \times 5 = \_\_\_\_\_$

$7 \times 8 = \ \times \ = \_\_\_\_\_$

6. Using any grid paper draw rectangles with an A (area) equal to:

a) 12 unit squares b) 20 unit squares

How many rectangles you can draw in each case?

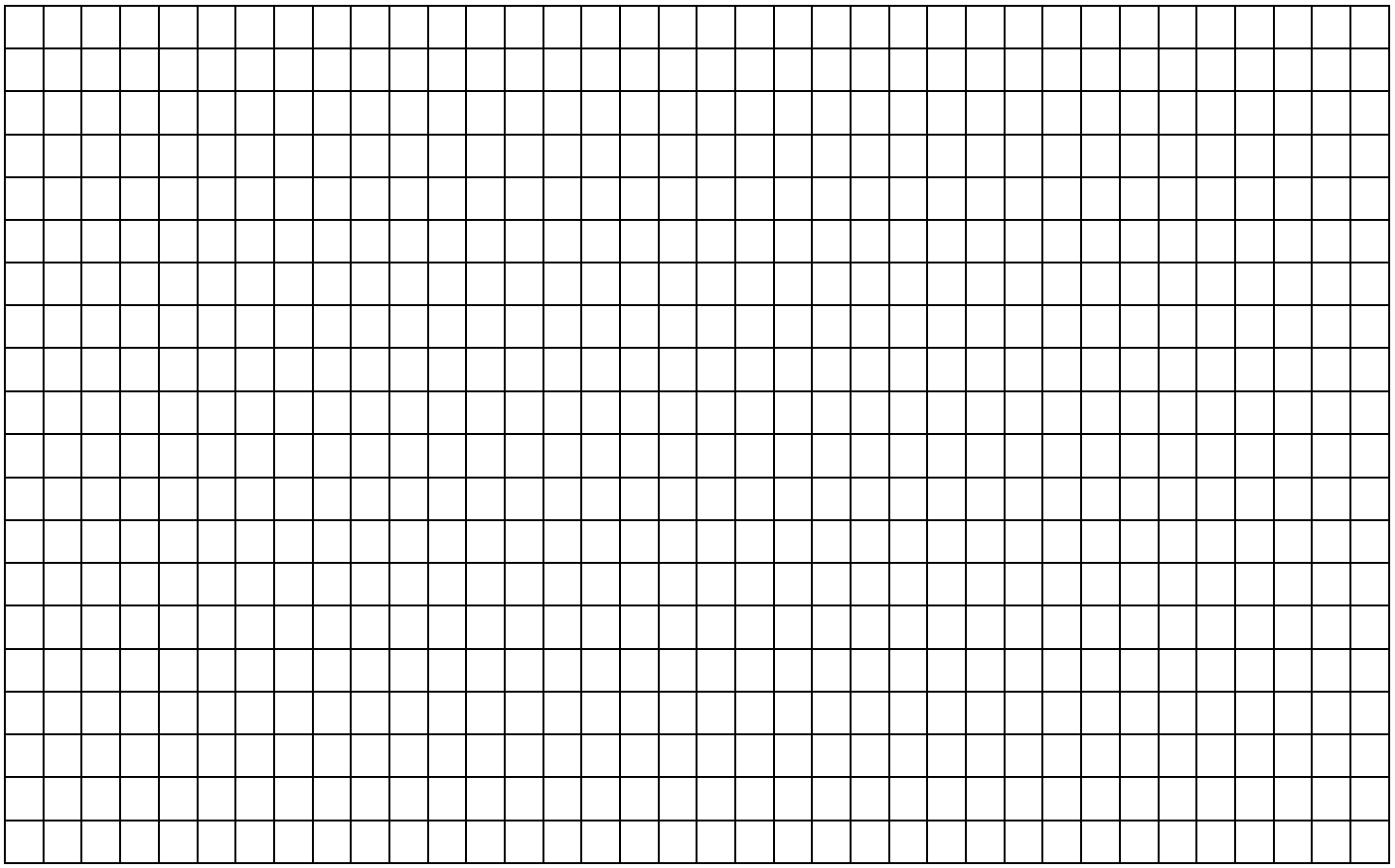
a) _____ b) _____

Calculate a perimeter (P) for each rectangle. What did you notice?

a) _____ b) _____

_____ _____

_____ _____



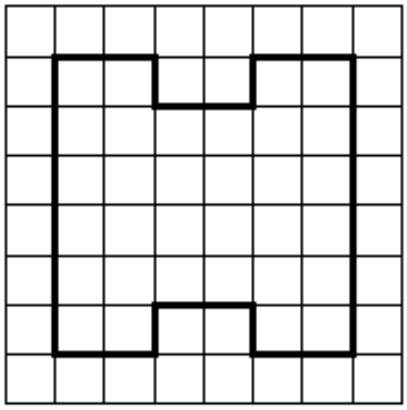
REVIEW

7. Which of the following letters have at least one line of symmetry?

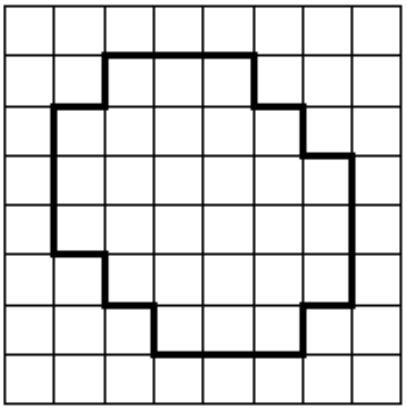
Q L U N O X

8. Find and draw lines of symmetry of the following figures:

(a)



(b)



9. Insert missing numbers:

$15 + (5 \times \ldots) = 25$ $15 + (5 \times \ldots) = 55$ $15 + (5 \times \ldots) = 40$

$15 + (5 \times \ldots) = 60$ $15 + (5 \times \ldots) = 70$ $15 + (5 \times \ldots) = 75$

10. a) There are 10 houses on the street. The distance between 2 neighboring houses are 8 meters. Adam lives in the 1st house and his friend Ben lives in the last house of the street. How many meters Adam should walk to visit Ben?

_____

Three meters log should be saw on the equal pieces of 30 centimeters each piece. How many pieces should be made and how many cuts need to be done?

11. Multiply as fast as you can – 85 samples for 3 minutes