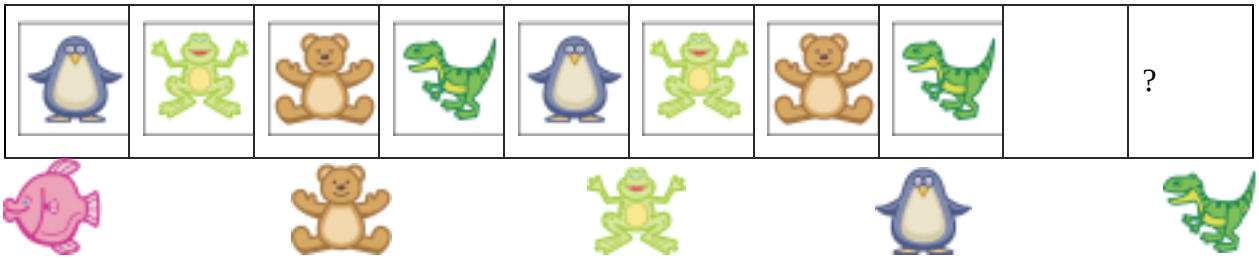
Math 2 Homework 20

1 Luke repeats the same four stickers on a strip. Which is the tenth sticker put by Luke?



(A) (B) (C) (D) (E)

2 A dragon has 3 heads. Every time a hero cuts off 1 head, 3 new heads emerge. The hero cuts 1 head off and then he cuts 1 off head again. How many heads does the dragon have now?

(A) 4 (B) 5 (C) 6 (D) 7 (E) 8

3 Winnie the Pooh bought 4 apple pies and Eeyore bought 6 cheesecakes. They paid the same and together they paid $24. How much does 1 cheesecake cost?

(A) 2 (B) 4 (C) 6 (D) 10 E) 12

Report the time you spent: _____ minutes

4 Open up parenthesis:

$(56 + s) + (d + 15) =$ $k - (b + m) =$

$(n + 4) - (a + b + c) =$ $(d + f) - (s - w) =$

$a - (45 - b) =$ $(170 - e) - (80 - a) =$

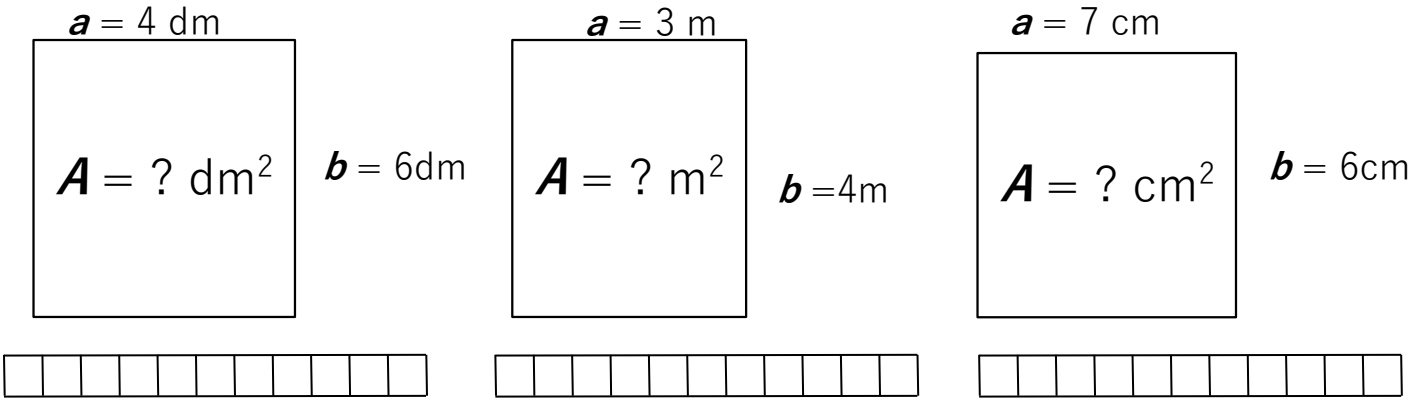
5 There are *N* pencils in the red box and *M* pencils in the white box. Masha took ***a*** pencils from the red box. Monty took ***b*** pencils from the white box. Explain the meaning of the following expressions.

a) N + M _____ c) M – b _____

b) N – a _____ d) a + b _____

HW 20 **Translational symmetry. Area.**

6 Find the area of the rectangles. Write your answer below, don't forget the units of measure!



7 Calculate:

20 × 30 =	15 × 100 – 15 × 10 =	200 × 2 – 200 × 0=
50 × 5 =	25 × 20 – 25 × 10 =	40 × 5 + 40 × 10 =

8 What is the area of the shaded part?
Use the given scale (the area of one small square is 1dm² or 100 cm²).
A = _____
Color the rectangle with the area 10 dm² on the grid.
Complete the equalities on the left.

1 m = 10 dm = 100 cm

1 m = 10 cm = 100 cm

1 m² = 100 dm²

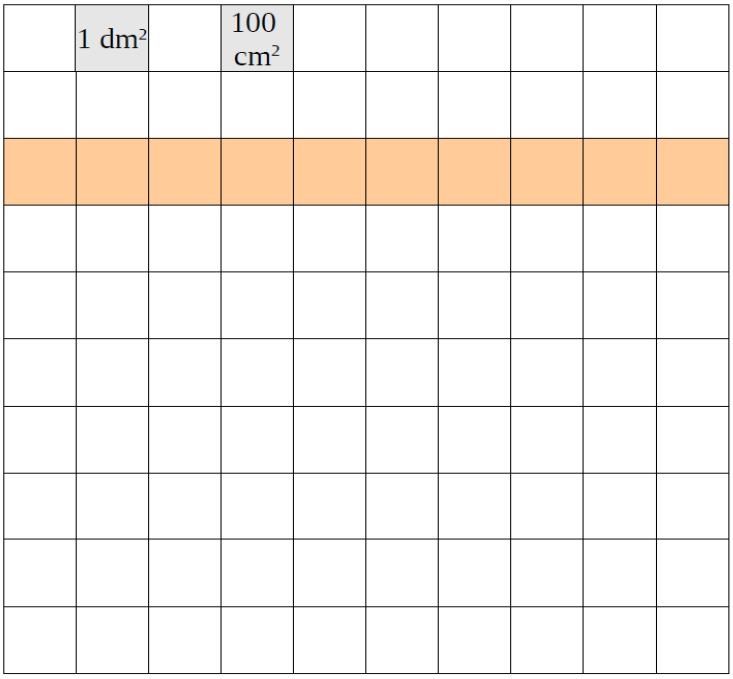
2 m² = ____ dm²

300 dm² = ____ m²

500 dm² = ____ m²

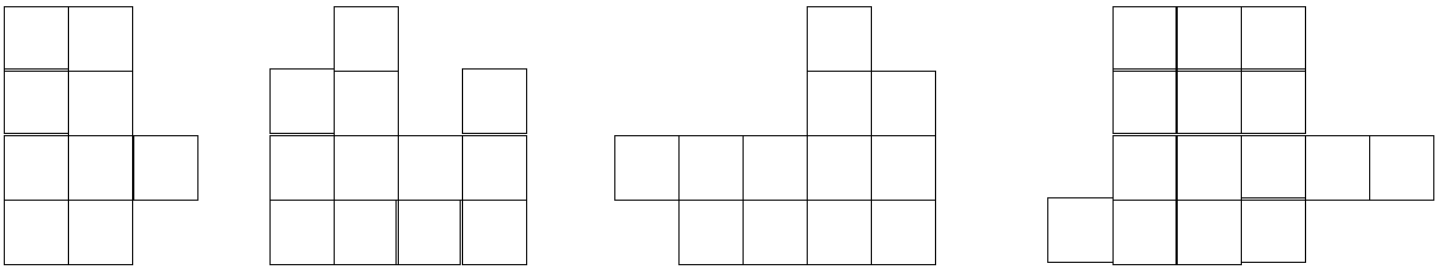
7 m² = ____ cm²

900 dm² = ____ m²



HW 20 **Translational symmetry. Area.**

9 Split the shapes below into **3** identical shapes. Color each part by a different color.



10 Fill in missing numbers:

__ × 8 = 64	__ × 7 = 49	__ × 6 = 54	__ × 8 = 16	__ × 2 = 20
__ × 7 = 63	__ × 5 = 45	__ × 8 = 40	__ × 4 = 36	__ × 8 = 24
4 × __ = 16	6 × __ = 36	10 × __ = 60	9 × __ =18	3 × __ = 27

11 **a)** Find the perimeter and area of the rectangle with the sides 6 cm and 8 cm. Specify the correct units.

P = _____ A = _____

b) Find the perimeter and area of the rectangle with the sides 4 cm and 7 cm.

P = _____ A = _____

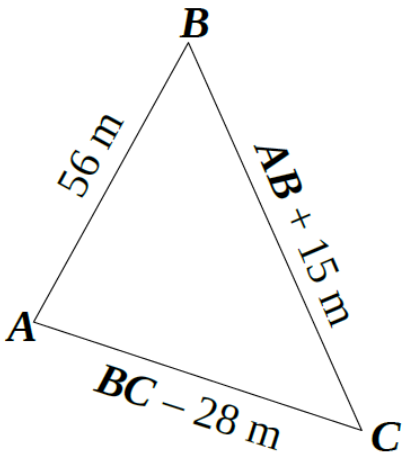
c) One side of the rectangle is 6 cm. Its area is 54 cm^2. What is the other side of the rectangle?

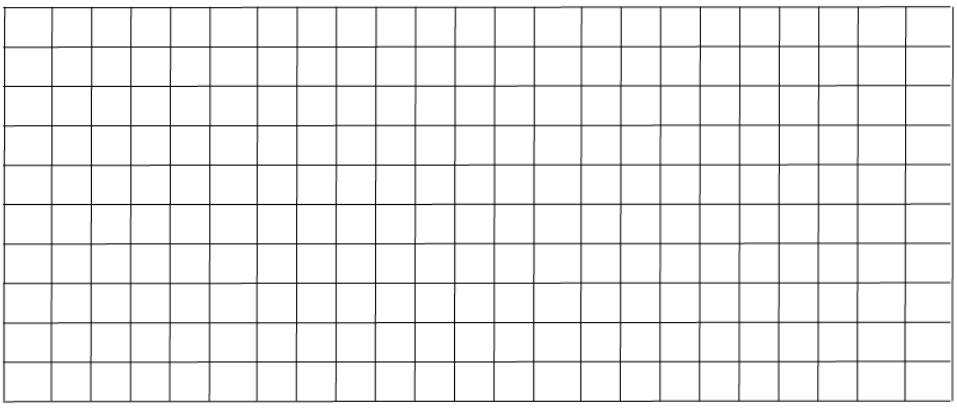
_____

d) One side of a rectangle is 6 cm. Its area is 42 cm^2. What is the other side of the rectangle?

_____

12 One side of a triangle is 56 m, the second side is 15 m longer than the first. The third side of the triangle is 28 m shorter than the second. What is the perimeter of the triangle?





13

a) Use a ruler to draw a line segment; name it ***AB***. Mark points ***C*** and ***D*** on ***AB***.
Use a ruler to draw a line segment, name it ***AB.*** Put the points ***C*** and ***D*** on the segment ***AB***.

How many line segments do you see in the drawing? _____

Name them: _____

b) Use a ruler to draw a ray, name it ***AB***. Put the points ***C*** and ***D*** on the ray ***AB***.

How many rays and line segments do you see in the drawing? _____

Name them: _____

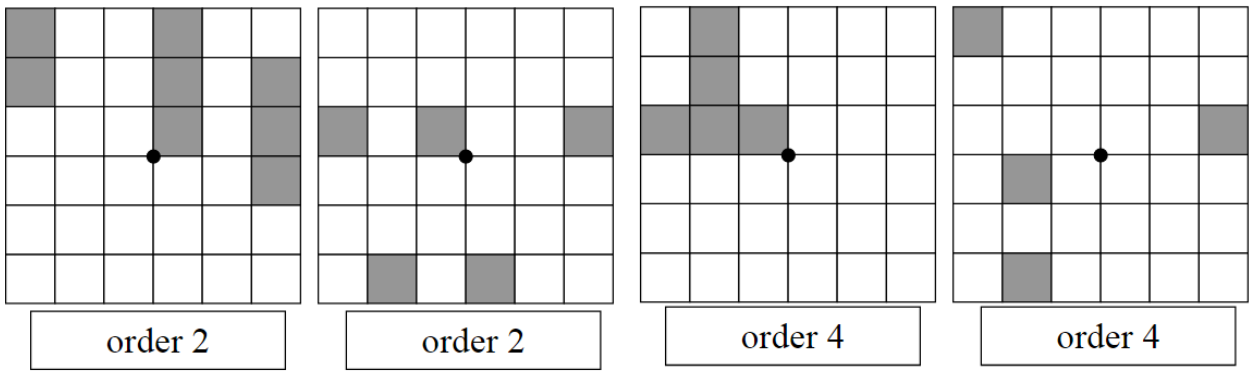
c) Use a ruler to draw a straight line, name it ***AB***. Put points ***C*** and ***D*** on the line ***AB***.

How many rays and line segments do you see in the drawing? _____

Name them: _____

14

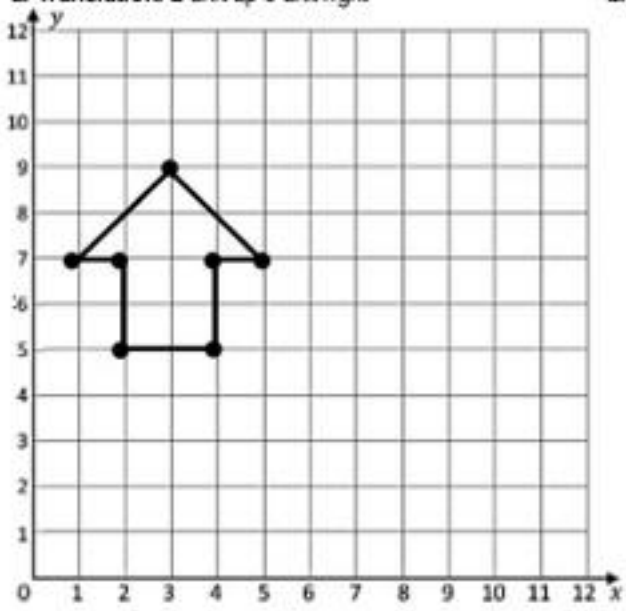
Finish the drawing according to the order of rotation symmetry. Rotation is around the point in the center.



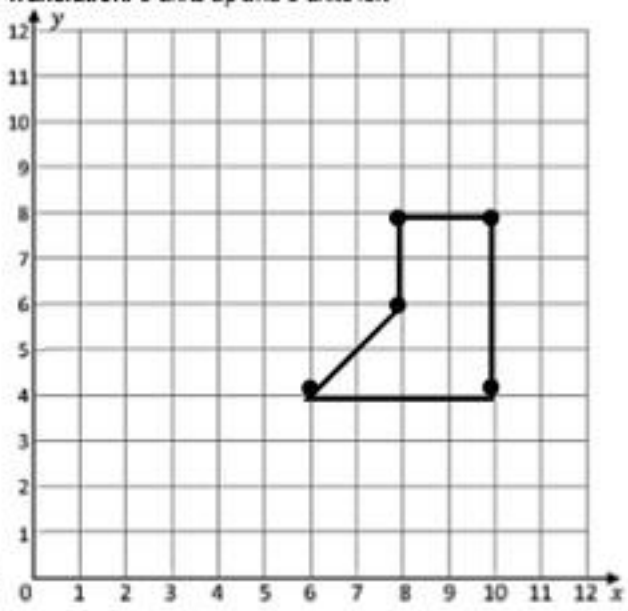
15

Translate the following figures.

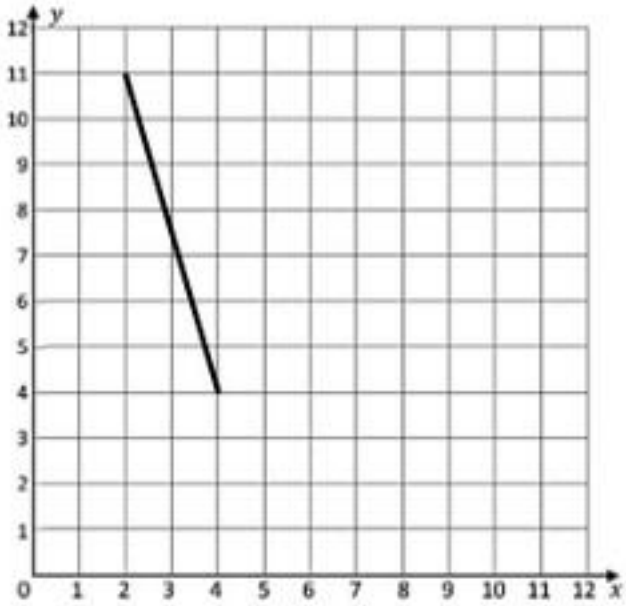
a. **Translation:** 2 unit up 6 unit right



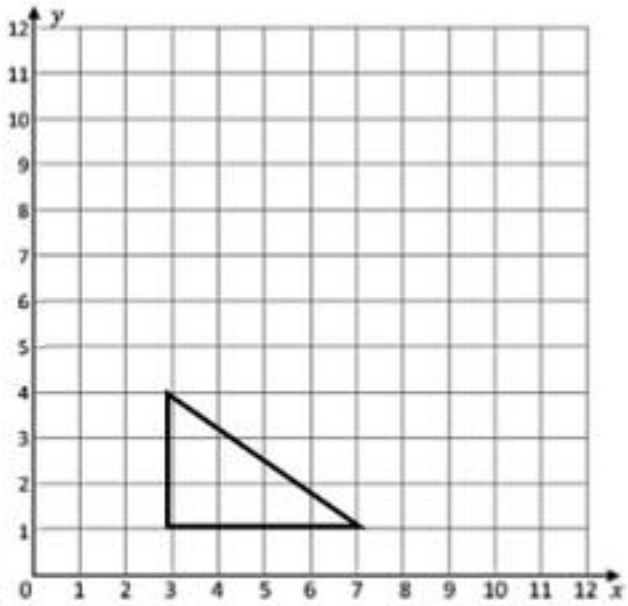
b. **Translation:** 3 units up and 5 units left



a. **Translation:** 6 unit right and 2 units down



b. **Translation:** 7 units up



16

Can you move just two of these matchsticks to form four triangles?