school nova™

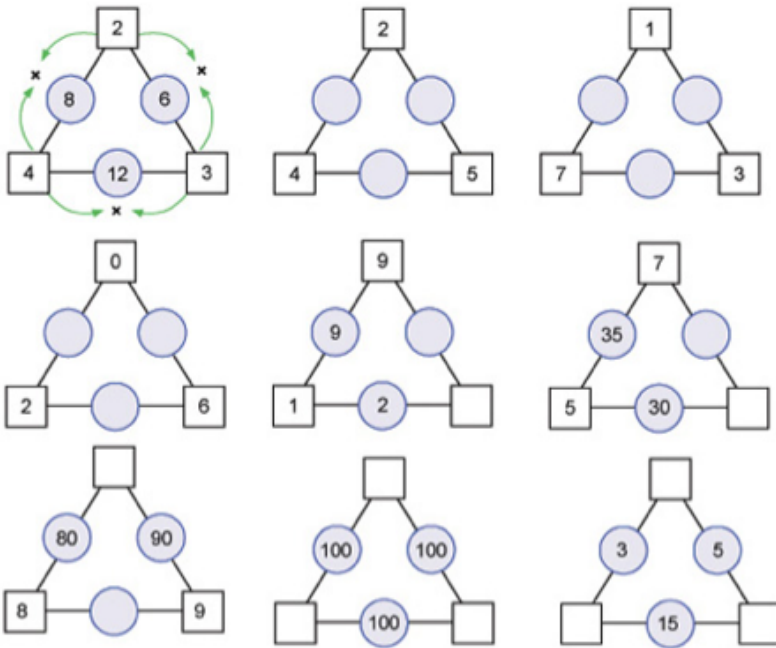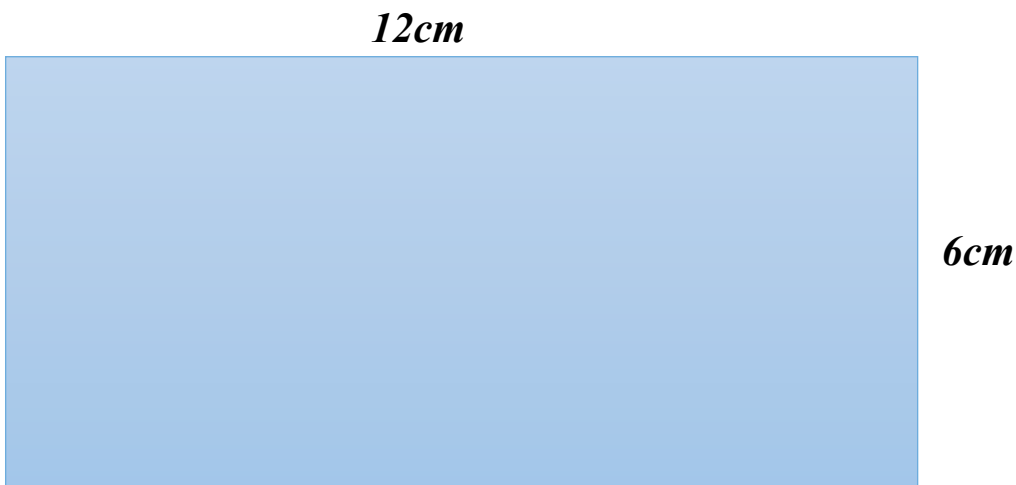**1.**

Insert missing numbers:

      a) 30, 27, 24, …, …, …, …, 9.

      b) …, 12, 18, …, …, 36, …, 48

2.

Complete the multiplication triangles below. The numbers in the corners of triangles multiply together to make the answer in the middle. The first triangle was completed for you.
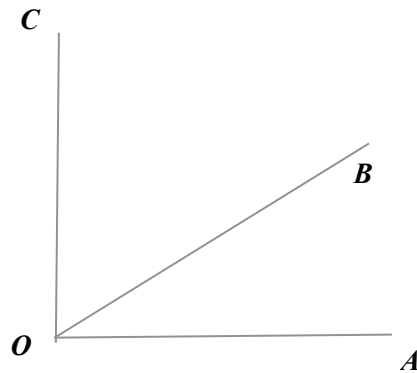

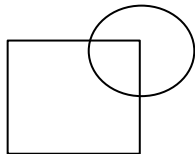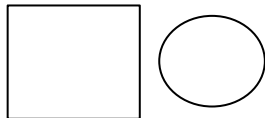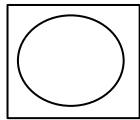**3.** If you split this rectangle up into 4 equal pieces, what would be the area of each piece?

12cm

6cm

Area of each peace = _____

4. Draw ray [**OK**) so that the angle ∠**BOK** would be a right angle and the ray [**OC**) would be inside the angle ∠**BOK**. Color the right angle green.

C

B

O

A

5. Connect each pair of sets with the corresponding Venn diagram.

- Set of apples

- Set of oranges

- Set of apples

- Set of sour apples

- Set of sweet fruits

- Set of apples

6. a) Jessica and Mary have an equal number of apples. Then Jessica gave 2 apples to Mary. How much more apples does Mary have now?

_____

b) Nick and Jack together have 24 toy cars. Nick has 6 cars more than Jack. How many cars does each of them have?

_____

7.

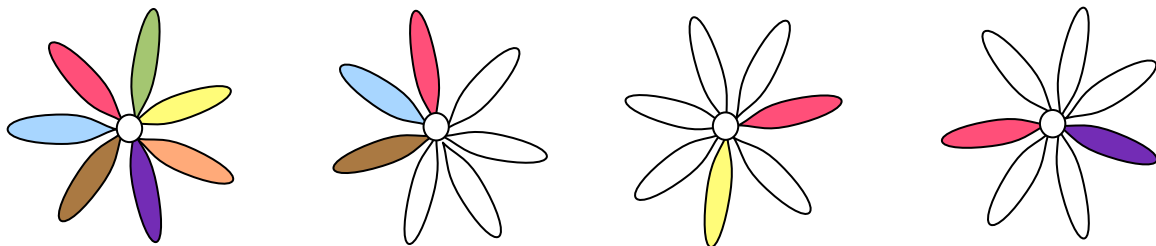a) Mom is making a chicken pie for dinner. She has been cooking the pie for 40 minutes. The pie needs to be baked for 25 more minutes. How many minutes does the chicken pie cook in total?

_____

b) The Smith family walked into museum at 12:40 pm. They walked out at 1:55 pm. How long was their visit?

_____

8. All of these flowers are the same. Color them.

9. Try to split the shapes below into 3 identical shapes. Color the each part differently.
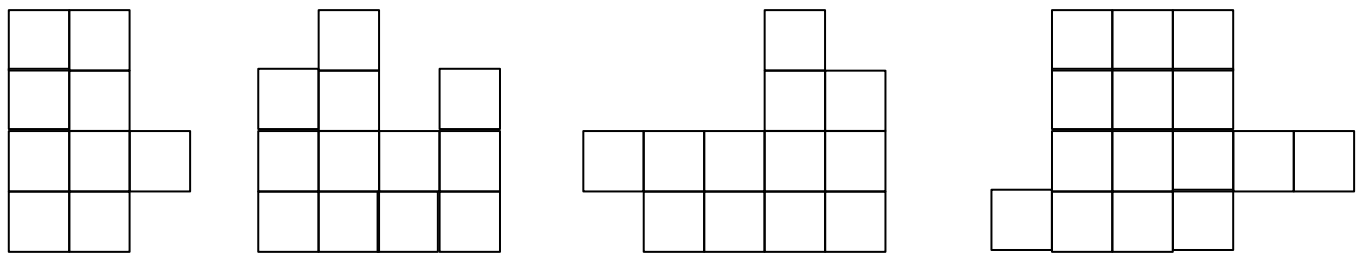
10. Fill in the empty boxes to make all equalities correct.
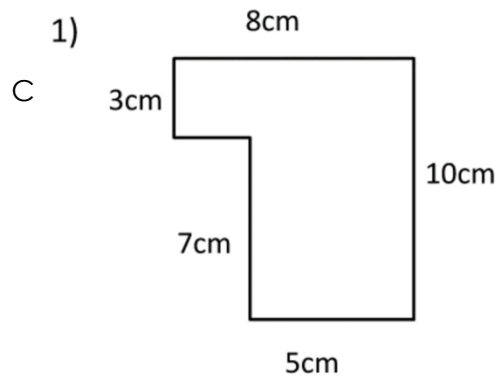
	×	3	=	
+		+		-
5	×		=	
=		=		=
	-		=	4

	×		=	12
+		+		:
	-	3	=	
=		=		=
10	-		=	

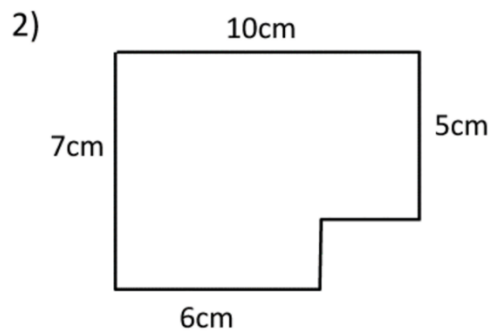**11.** Compose all possible equalities with the given expressions:

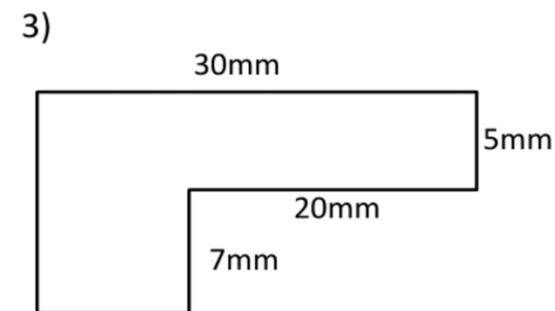$48 \div 8$ $45 \div 9$ $54 \div 9$ $95 - 90$ 3×2 $18 \div 3$ $30 \div 6$

_____

_____

_____

12. Figure out the area of the following shapes by dividing them in rectangles

1)

C   3cm   8cm

10cm

7cm

5cm

Area= _____ (cm²)

2)

10cm

7cm   5cm

6cm

Area= _____ (cm²)

3)

30mm

5mm

20mm

7mm

Area = _____ square mm (mm²)

4)

7m

4m

1m

2m

Area = _____ square m (m²)

4
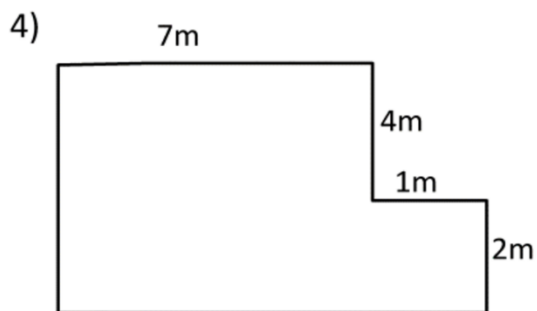
13. Color the shapes in the correct order according to the key below.

Shapes are solid (they are not see-through), therefore the figure on top will have the full shape shaded, the figure under will only be partially shaded with it's color.