1 In your notebook solve the equations.

$678 + x = 735$ $y - 316 = 691$ $z + 59 = 974$

$x =$ _____ $y =$ _____ $z =$ _____

2 Open up the parentheses:

$(s + 3) + (4 + a) =$ $(f + 4) - (g + 64) =$

$(n + b - d) + 14 =$ $(20 - t) - (w + v) =$

$(d + 8) + (7 - a) =$ $(20 - z) - (7 - a) =$

3 Solve word problems:

A. There are 3 coins in a chest. There are also 4 more silver coins than gold coins in the chest. How many silver coins are in the chest?

_____

B. There are 3 coins in a chest. There are also 4 times more silver coins than gold coins in the chest. How many silver coins are in the chest?

_____

C. There are 3 coins in a chest. There are also 4 times more silver coins than gold coins in the chest. How many coins are in the chest in total?

_____

4

One of the fifteen identically looking coins is fake. It is known that the fake coin is heavier than the real one. How many weighings on a balance scale do you need to find a fake coin?

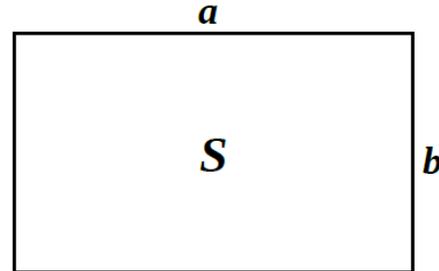**5** Write all possible equalities below.

5 x 7 = 35   6 x 8 = 48

□ × □ = □   □ × □ = □

□ : □ = □   □ : □ = □

□ : □ = □   □ : □ = □

$a \times b = S$

□ × □ = □

$S : □ = □$

□ : □ = □

a

S

b

Area of compound shapes.

6   Find the area of the shape

4cm

3cm

3 cm

7 cm

4cm

7cm

4cm

4cm

3cm   (4x3) + (7 x 4)

3 cm   4x3 = 12

7 cm   7x4 = 28
                     28+12 = 40cm^2
           4cm

7cm

4cm

3cm

3 cm   (3x4) + (7x4)
            3x4=12
            7x4=28
            28+12 = 40cm^2

7 cm

4cm

7cm

4cm

3cm   (7 x 7) - (3 x 3)

3 cm   4cm

7 cm   7x7 = 49
                    3x3 = 9
                    49-9 = 40cm^2
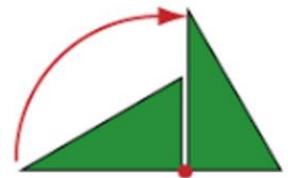
7cm
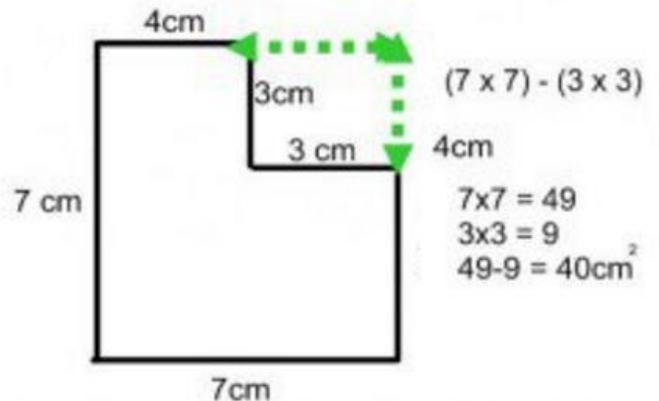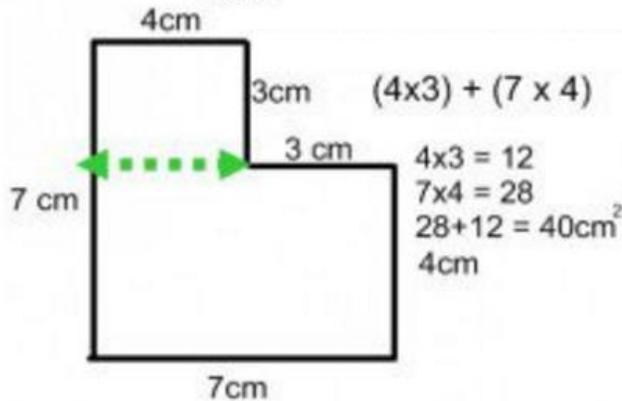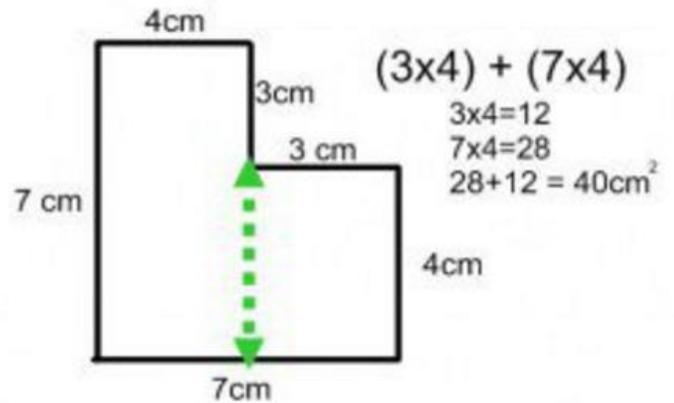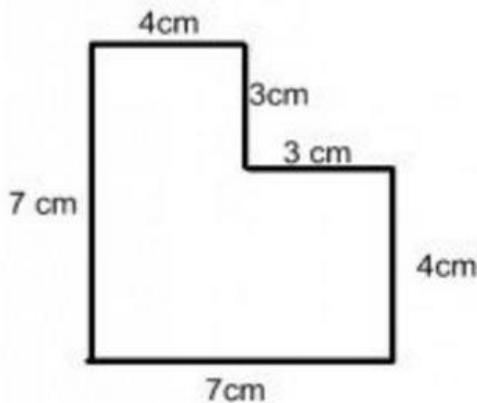
Flip, Slide and Turn
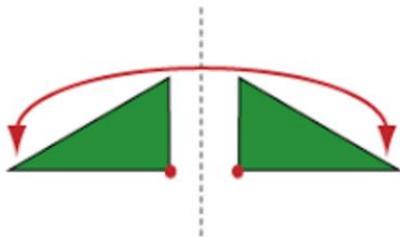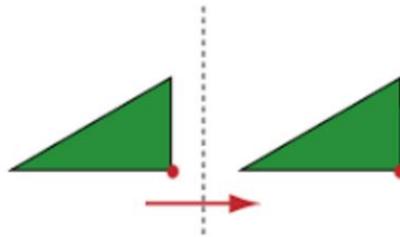
Flip	Slide	Turn
Reflection	Translation	Rotation

A *flip* or *reflection* occurs when a figure moves (or flips) across a straight line in such a way that the new position is a mirror image of the original.

A *slide* or *translation* occurs when a figure moves without changing its appearance.

A *turn* or *rotation* occurs when a figure turns around a point.

7

1.	2.	3.
slide flip turn	slide flip turn	slide flip turn

4.	5.	6.
slide flip turn	slide flip turn	slide flip turn

7.	8.	9.
slide flip turn	slide flip turn	slide flip turn

| 10. | 11. | 12. |

Rotational symmetry.

A shape has **rotational symmetry** if it fits onto itself two or more times in one turn.
The **order** of rotational symmetry is the number of times the shape fits onto itself in one turn.
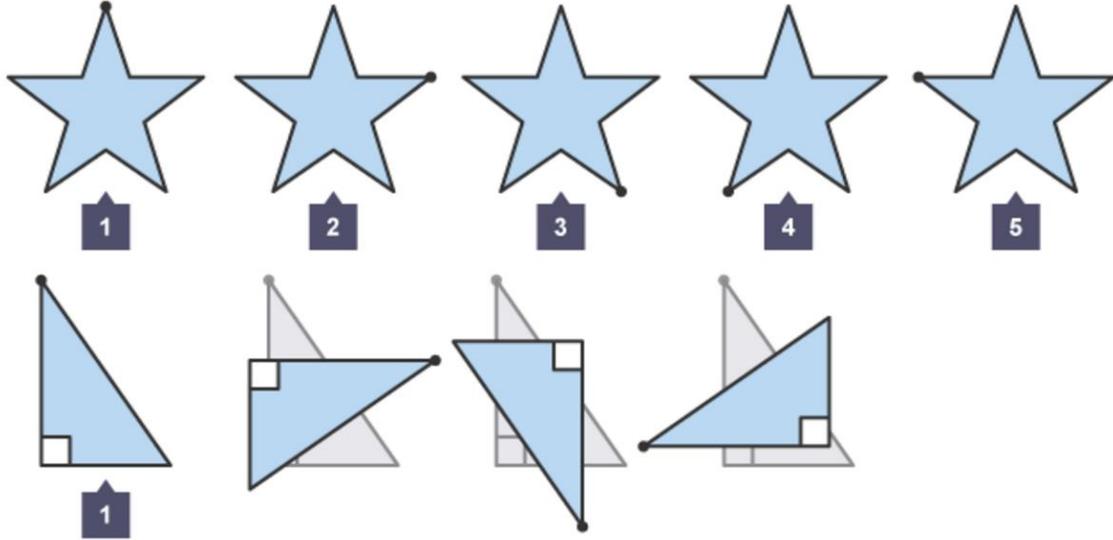
8 Find order of rotation symmetry.

(1)

(3)

(2)

(4)

(5)

(6)

(7)

9
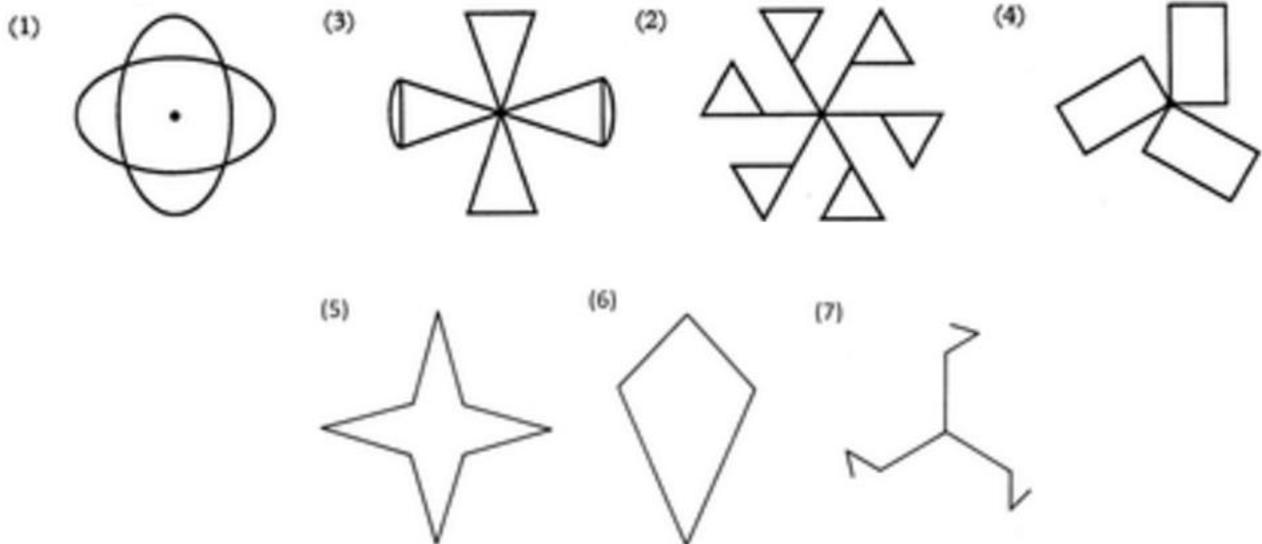
Can you help Little Joe and Foxy Tail put rugs in this room?

			4	
			2	
		2	3	3
3	3			2
	3			