

## Area of compound shapes. Rotational symmetry.

1 In your notebook solve the equations.

$$678 + x = 735$$

$$x = \underline{\quad}$$

$$y - 316 = 691$$

$$y = \underline{\quad}$$

$$z + 59 = 974$$

$$z = \underline{\quad}$$

2 Open up the parentheses:

$$(s + 3) + (4 + a) =$$

$$(n + b - d) + 14 =$$

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

$$(f + 4) - (g + 64) =$$

$$(20 - t) - (w + v) =$$

$$(20 - z) - (7 - a) =$$

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?

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**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?

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**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?

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



5 Write all possible equalities below.

$$5 \times 7 = 35$$

$$6 \times 8 = 48$$

$$\square \times \square = \square$$

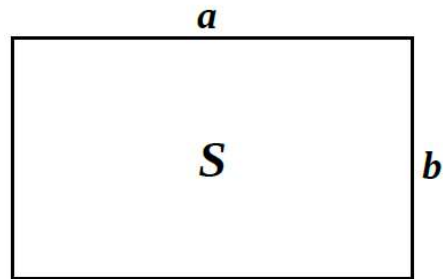
$$\square \times \square = \square$$

$$\square : \square = \square$$

$$\square : \square = \square$$

$$\square : \square = \square$$

$$\square : \square = \square$$



$$a \times b = S$$

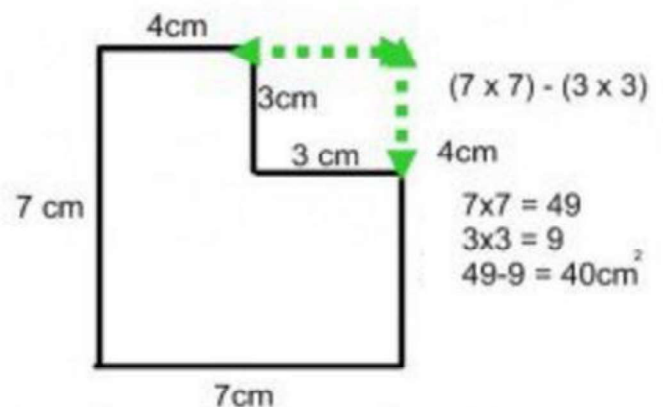
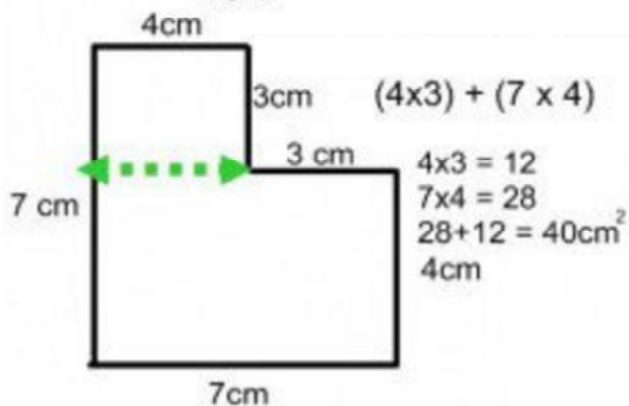
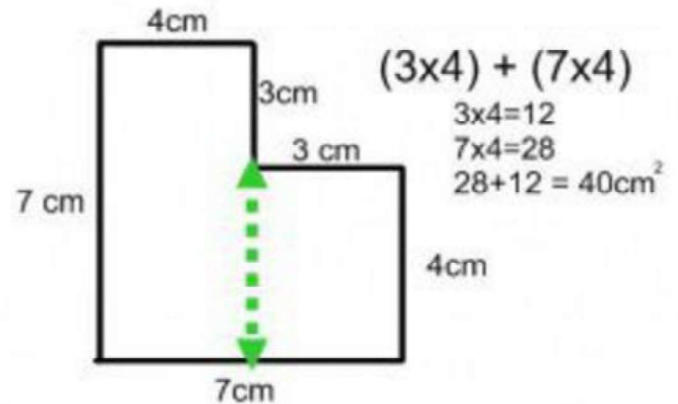
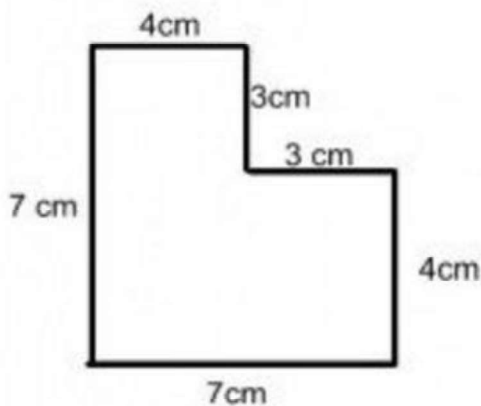
$$\square \times \square = \square$$

$$S : \square = \square$$

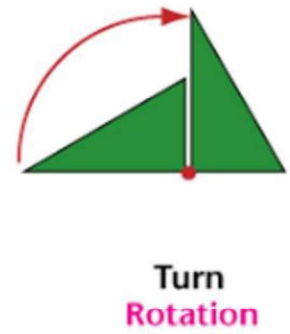
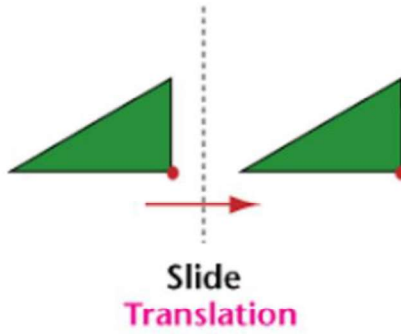
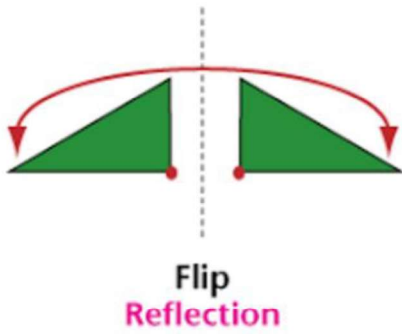
$$\square : \square = \square$$

### Area of compound shapes.

6 Find the area of the shape



## Flip, Slide and Turn



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.

5

<p>1.</p> <p>slide   flip   turn</p>	<p>2.</p> <p>slide   flip   turn</p>	<p>3.</p> <p>slide   flip   turn</p>
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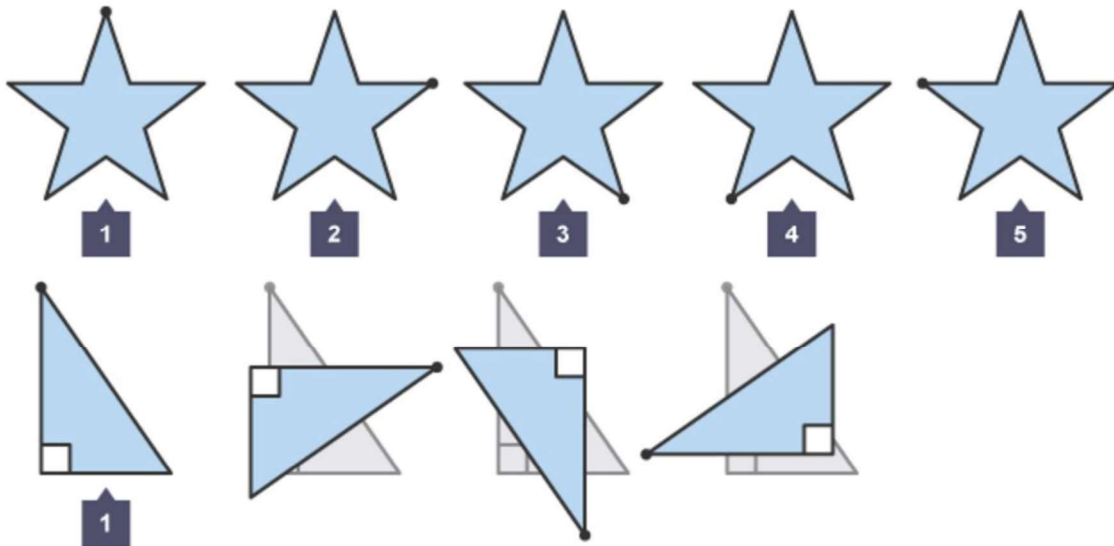
<p>4.</p> <p>slide   flip   turn</p>	<p>5.</p> <p>slide   flip   turn</p>	<p>6.</p> <p>slide   flip   turn</p>
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<p>7.</p> <p>slide   flip   turn</p>	<p>8.</p> <p>slide   flip   turn</p>	<p>9.</p> <p>slide   flip   turn</p>
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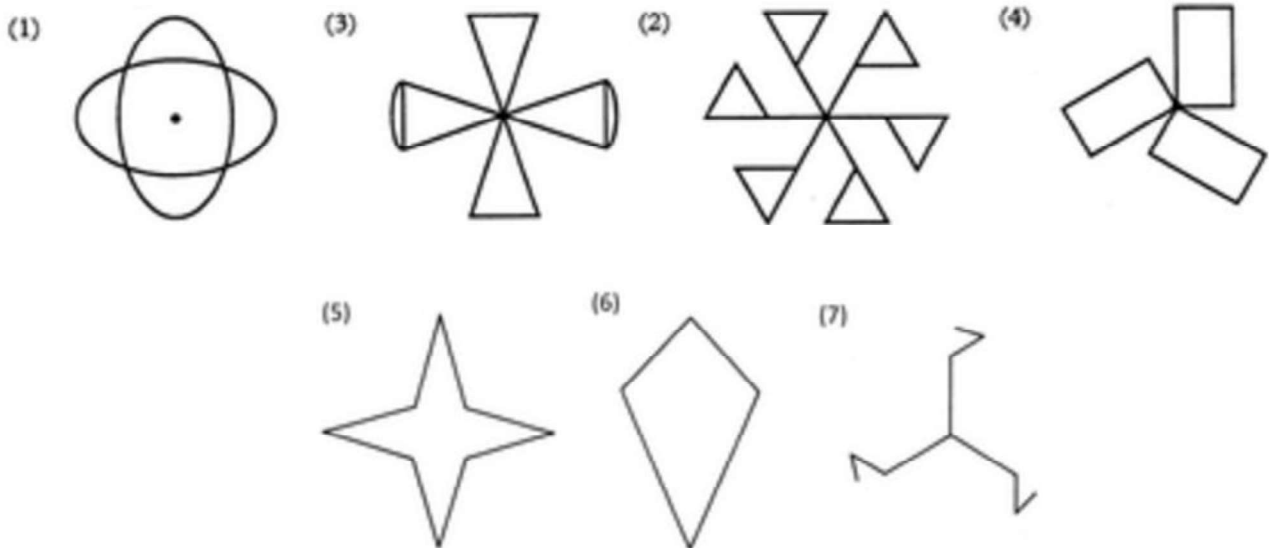
<p>10.</p> <p>slide   flip   turn</p>	<p>11.</p> <p>slide   flip   turn</p>	<p>12.</p> <p>slide   flip   turn</p>
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## Rotational symmetry.

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.



7 Find order of rotation symmetry.

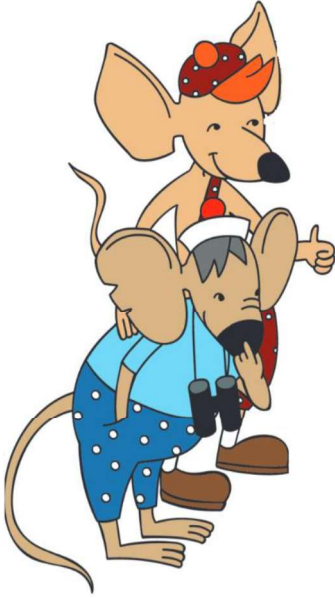


7



8

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



			4	
			2	
		2	3	3
3	3			2
	3			