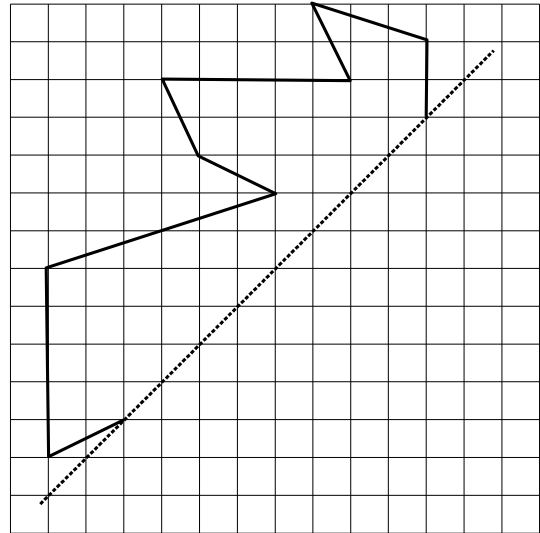
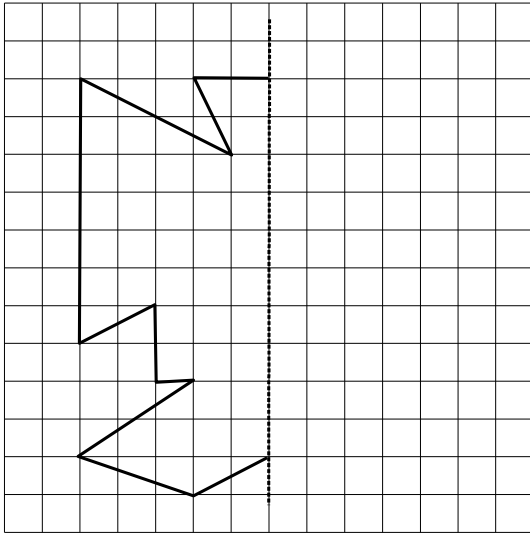
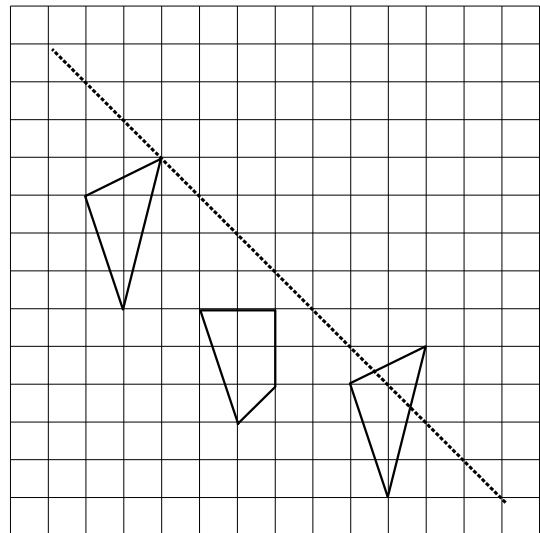
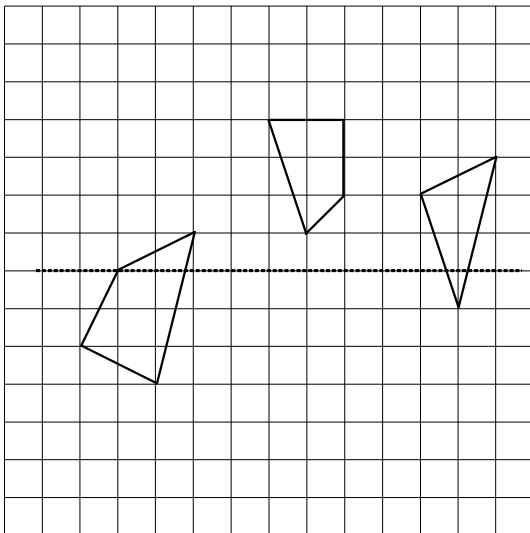


1. Reconstruct the shapes that have axis of symmetry:



2. Plot symmetric images:



3. Remove parenthesis:

$$3 \cdot (y - a + 2) = \underline{\hspace{2cm}}$$

$$w \cdot (x - 2 + 3w) = \underline{\hspace{2cm}}$$

$$2w \cdot (w + 3 + y) = \underline{\hspace{2cm}}$$

$$a \cdot (2x + 4 + 3a) = \underline{\hspace{2cm}}$$

$$3x \cdot (x + 3 - 2y) = \underline{\hspace{2cm}}$$

$$x \cdot (2x + b - 2) = \underline{\hspace{2cm}}$$

$$x \cdot (x - 2y + w) = \underline{\hspace{2cm}}$$

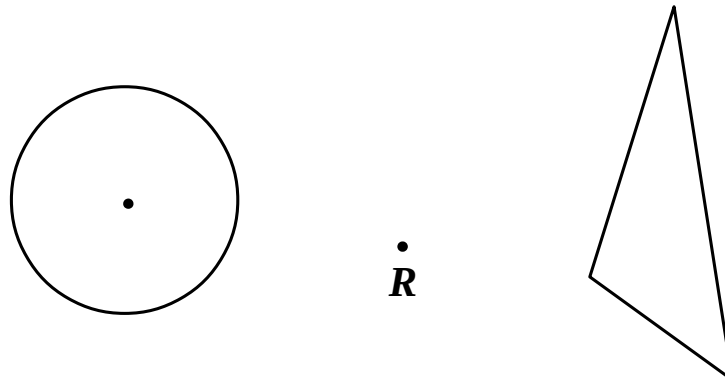
$$2y \cdot (x - 3 + 3y) = \underline{\hspace{2cm}}$$

$$x \cdot (2x - 2 - 3a) = \underline{\hspace{2cm}}$$

$$2y \cdot (2x - 9 + 4y) = \underline{\hspace{2cm}}$$

**4\***. A plane transforms in a way that points  $R$  remains immobile, while every other point  $A_1$  moves into such a position  $A_2$  that  $\overline{RA_2} = 2\overline{RA_1}$ . Plot the images of the triangle and a circle on the drawing produced by this transformation.

(Hint: you need to identify some “important points” and move them twice further from point  $R$ ; think what will happen to the circle size)



**Complete in your notebook**

**5.** Show solutions of the equations:

**a).**  $|3x + 2| = 7$       **b).**  $3 \cdot (2x - 1) + 2 \cdot (7 - x) = 4 \cdot (2x + 1) - 1$       **c).**  $\frac{1}{1 + \frac{1}{x}} = \frac{1}{3}$

(Answers: a)  $\{-3, 2\}$ ; b)  $x = 2$ ; c)  $x = \frac{1}{2}$ )

**6.** Show the solutions of the word problems:

**a).** An automated combiner can plow  $1\frac{1}{4}$  acre in one hour. How long will it take to plow 75 acres? (60 hours)

**b).** A super-combiner can plow  $3\frac{3}{4}$  acre in one hour. How long will it take the super combiner to plow the 75 acre field? (20 hours)

**c).** How long will it take both machines to finish the 75 acre field? (15 hours)

**7.** You have a large barrel of lemonade and two measures: 3 liters and 5 liters. They do not have any other marks. How could you use these measures to measure exactly ...

**a).** ... 2 liters of lemonade ...

**b).** 4 liters of lemonade ...

**c).** 1 liter of lemonade ...      ... into another large bucket of unknown size?