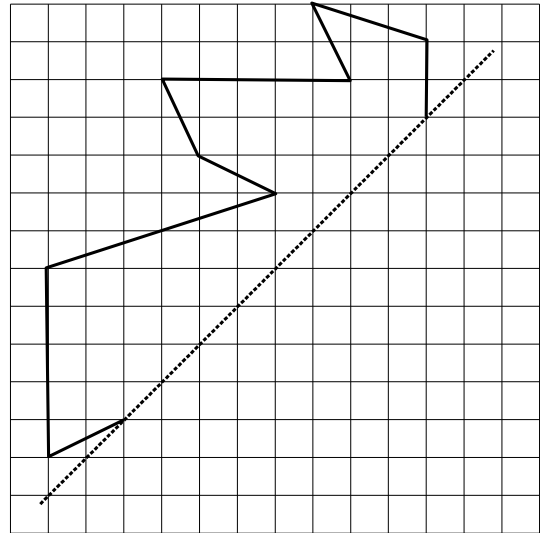
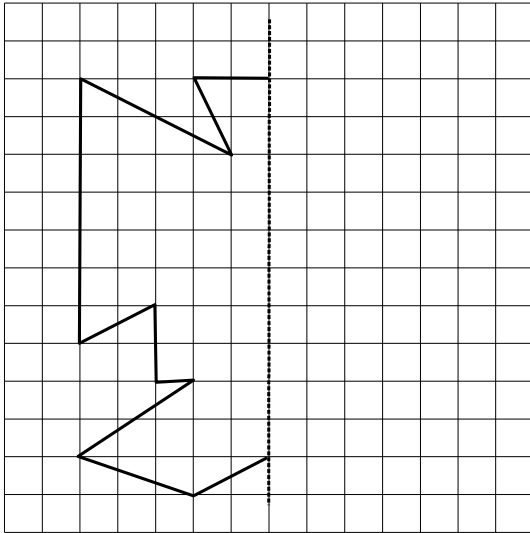
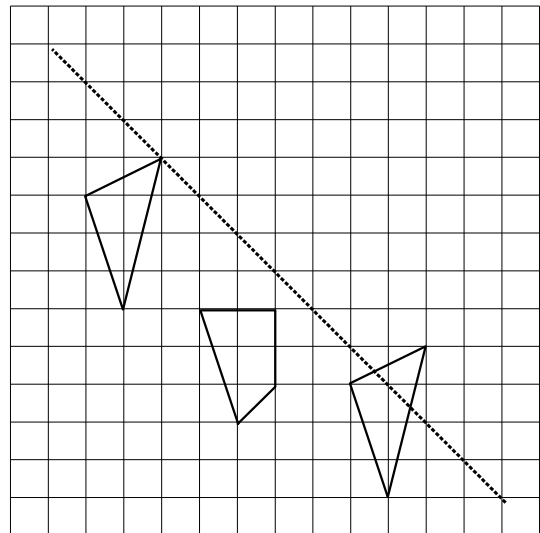
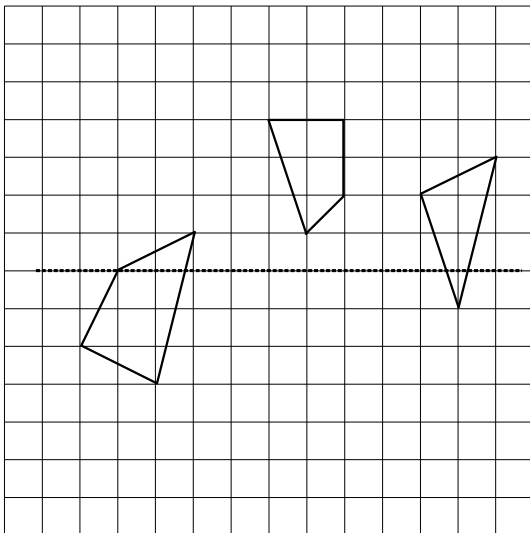


1. Reconstruct the shapes that have axis of symmetry:



2. Plot symmetric images:



3. Remove parenthesis:

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

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

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

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

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

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

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

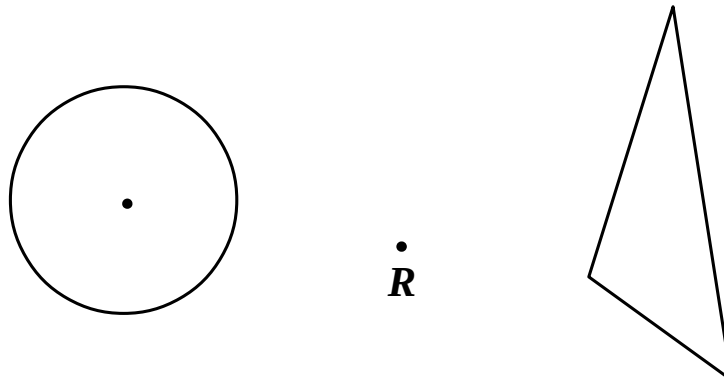
$$2y \cdot (x - 3 + 3y) = \underline{\hspace{2cm}}$$

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

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

4*. A plane transforms in a way that points **R** remains immobile, while every other point **A₁** moves into such a position **A₂** 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-combinder 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?