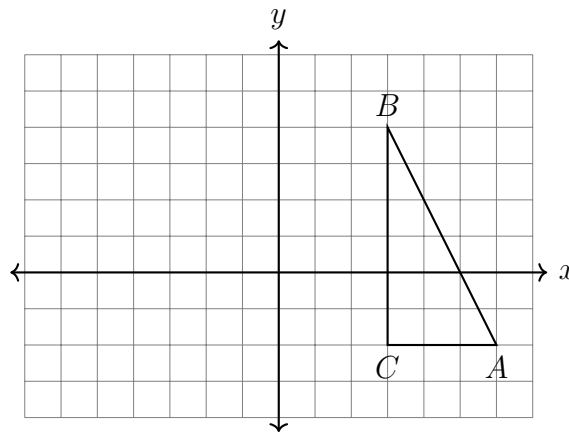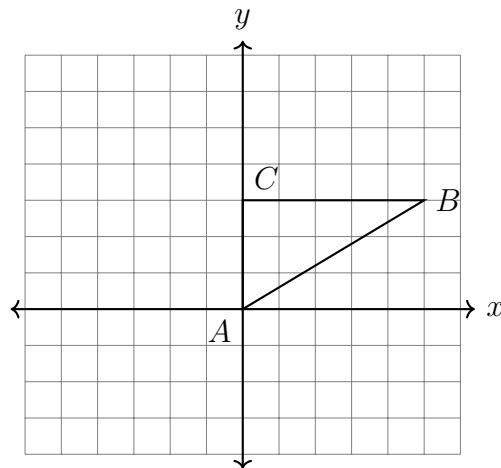## 1.16 Quiz: Transformations and constructions

1. Reflect $\triangle ABC$ across the y-axis. Label the image $\triangle A'B'C'$.

2. Rotate $\triangle ABC$ 90° counterclockwise around the origin. Label the image $\triangle A'B'C'$.

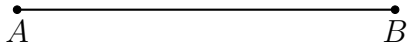3. Use the function $f(x) = -2x + 7$ to answer the questions.

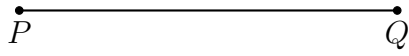   (a) What is $f(2)$?

    (c) Solve for x if $f(x) = -11$.

    (b) Find $f\left(\frac{3}{2}\right)$
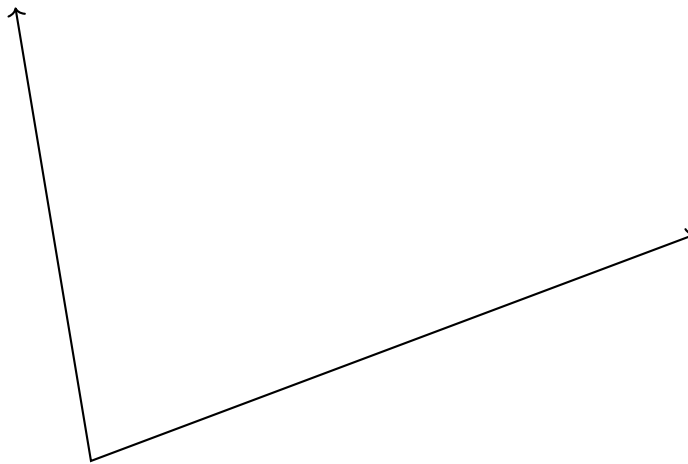
Constructions: Use only a compass & straightedge

4. Construct an equilateral triangle with one side $\overline{AB}$.

5. Construct a perpendicular bisector of $\overline{PQ}$.

A B

P Q

6. Construct an angle bisector the given angle.

7. Fill in the blank: "Slow and _____ wins the race."

8. Construct a perpendicular bisector of side $\overline{AC}$ of the triangle. Label the midpoint of $\overline{AC}$ as M. Connect the points M and B with a line, a median of the triangle.