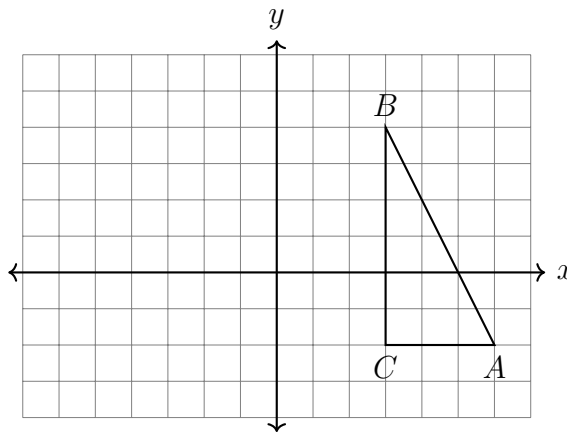
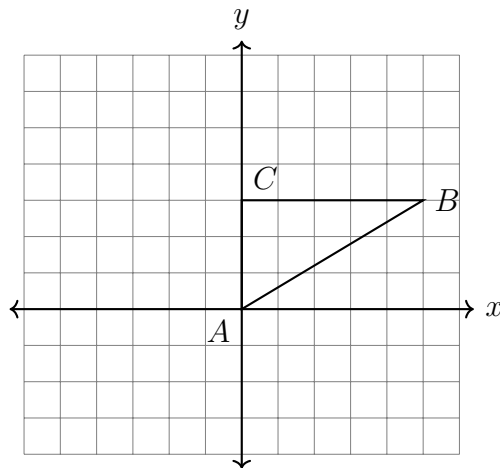


### 1.16 Quiz: Transformations and constructions

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



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



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

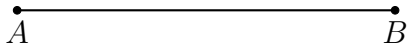
(a) What is  $f(2)$ ?

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

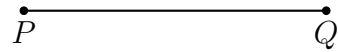
(b) Find  $f(\frac{3}{2})$

**Constructions: Use only a compass & straightedge**

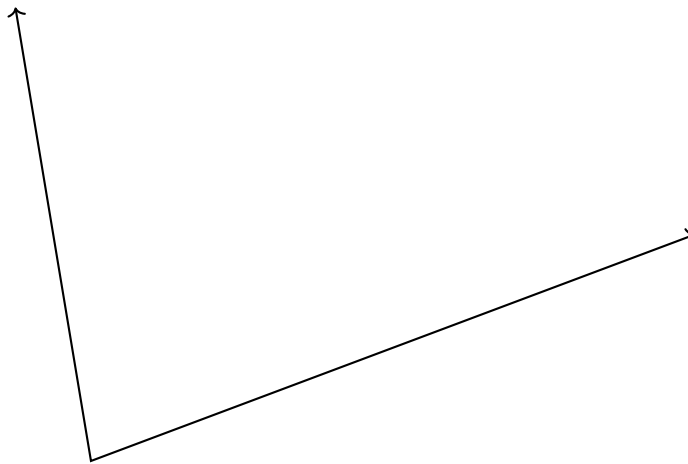
4. Construct an equilateral triangle with one side  $\overline{AB}$ .



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

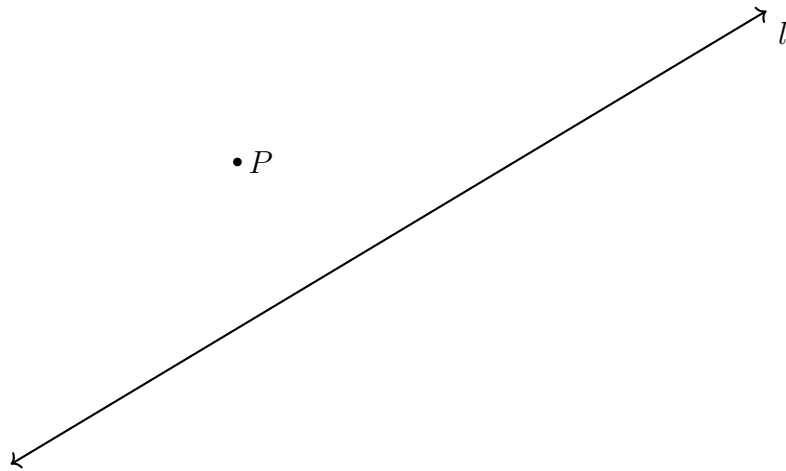


6. Construct an angle bisector the given angle.



7. Fill in the blank: “Slow and \_\_\_\_\_ wins the race.”

8. Construct a perpendicular to line  $l$  through the point  $P$ .



9. Construct a square with one side  $\overline{AB}$ .

