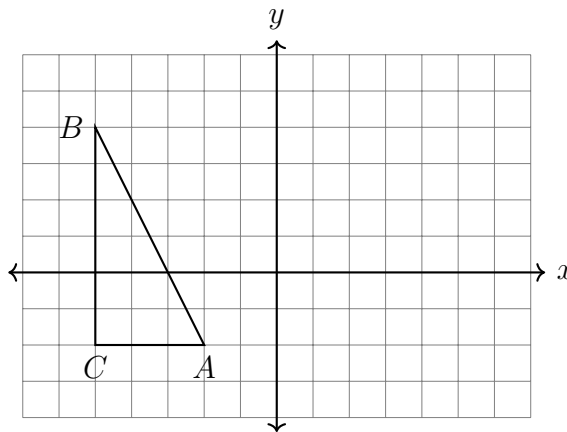
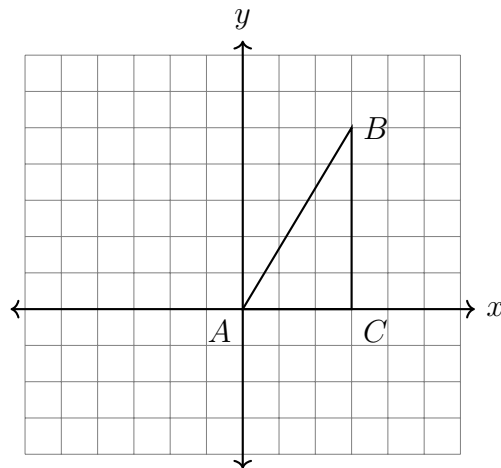


**1.15 Do Now: Transformations and constructions**

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  $f(x) = 8x + 3$  to answer the questions.

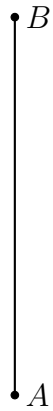
(a) What is  $f(0)$ ?

(c) Solve for  $x$  if  $f(x) = -13$ .

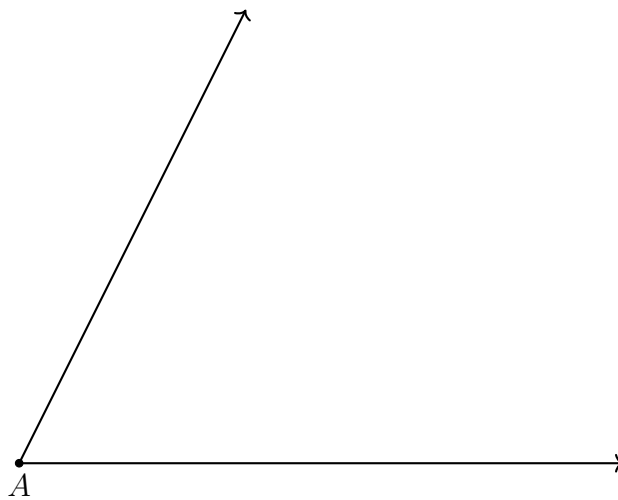
(b) Find  $f(\frac{1}{4})$

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

4. Construct an equilateral triangle with one side  $\overline{AB}$ . [Leave all construction marks.]



5. Construct an angle bisector the given angle  $A$ . [Leave all construction marks.]



6. 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.

