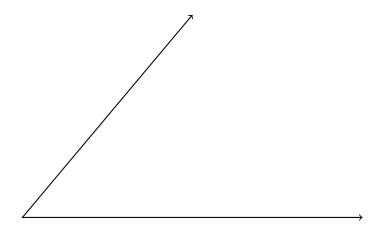
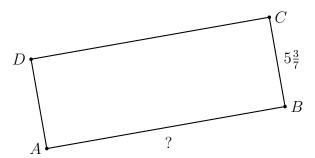
## 3.2 Homework: Segment & Area Calculations

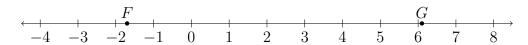
1. Complete the construction of the bisector of the given angle.



2. Given the rectangle ABCD shown below, with  $BC=5\frac{3}{7}$ . If the area of the rectangle is 76, find AB.



- 3. The area of a square is 144 square feet.
  - (a) Find the length of the side of the square s.
  - (b) Find the perimeter of the square.
- 4. Given  $\overrightarrow{FG}$  as shown on the number line, with F = -1.7 and G = 6.1.



The point H is the bisector of  $\overline{FG}$ . Find the value of H, and mark and label it on the numberline  $\overline{FG}$  above.

5. Given that  $m \angle 2 = 5x + 30$  and  $m \angle 4 = 7x - 10$  as shown in the diagram, find  $m \angle 2$ .

