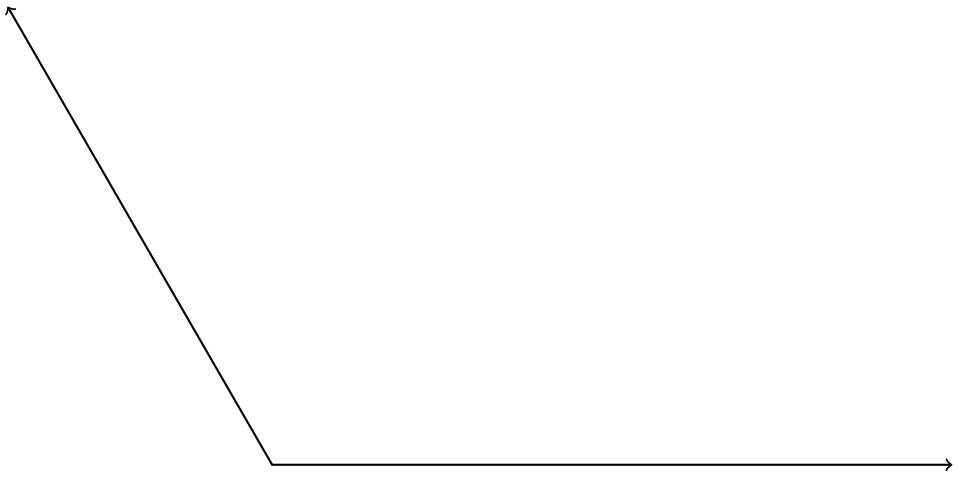
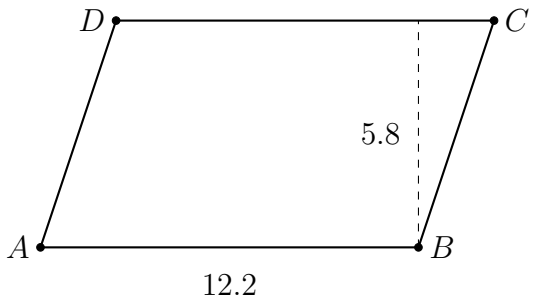
3.3 Homework: Segment & Area Calculations

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



2. Find the area of the parallelogram $ABCD$ shown below, with $AB = 12.2$ and height $h = 5.8$.

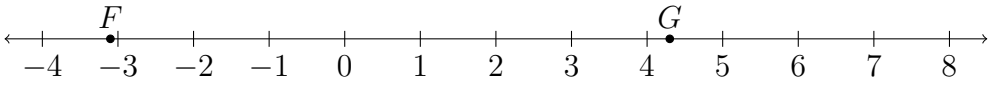


3. The volume of a cube is 27 cubic inches.

   (a) Find the length of the side of the cube, s.

   (b) Find the area of one face of the cube.

4. Given $\overleftrightarrow{FG}$ as shown on the number line, with $F = -3.1$ and $G = 4.3$.



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

5. Given that $m\angle 1 = 1x + 30$ and $m\angle 4 = 6x + 10$ as shown in the diagram, find $m\angle 2$.