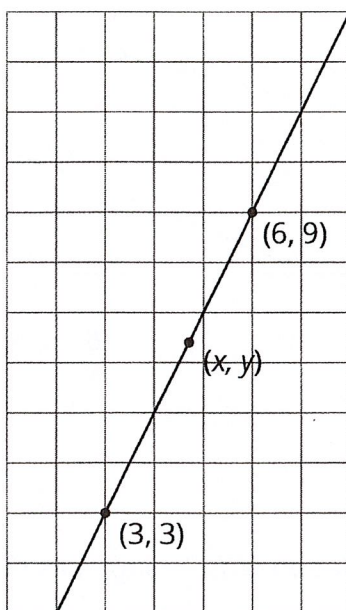


Lesson 12 Practice Problems

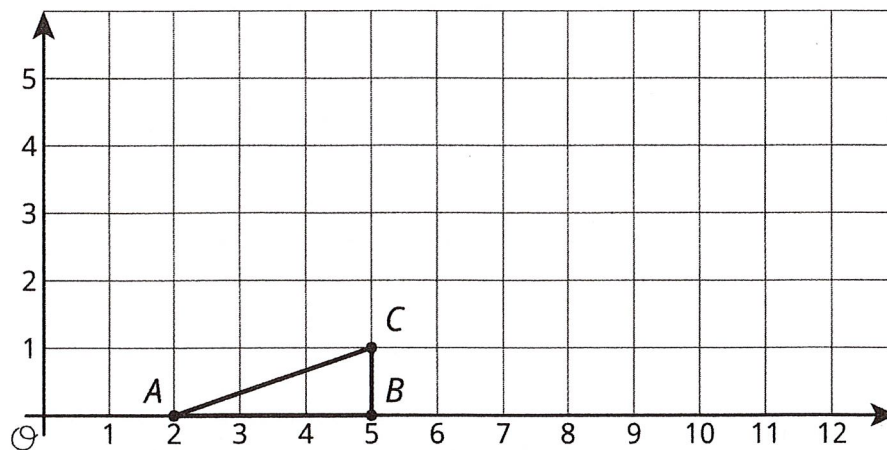
1. Select **all** the points that are on the line through $(0, 5)$ and $(2, 8)$.

- A. $(4, 11)$
- B. $(5, 10)$
- C. $(6, 14)$
- D. $(30, 50)$
- E. $(40, 60)$

2. All three points displayed are on the line. Find an equation relating x and y .



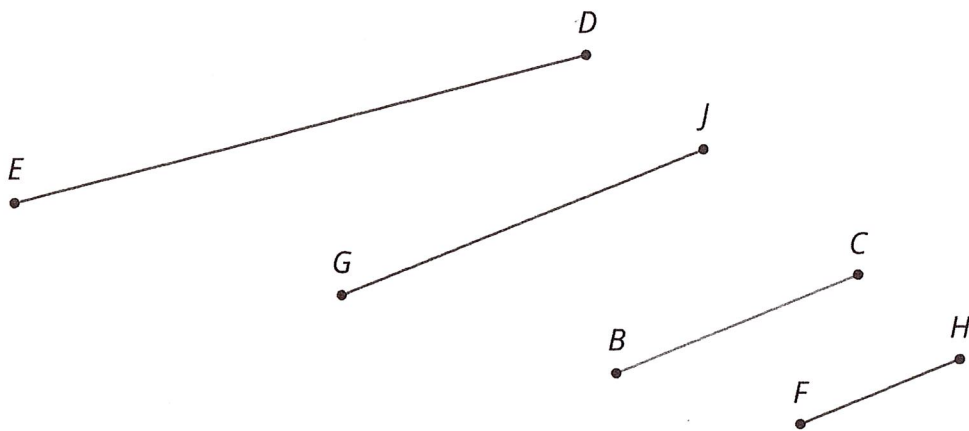
3. Here is triangle ABC .



a. Draw the dilation of triangle ABC with center $(2, 0)$ and scale factor 2.

- b. Draw the dilation of triangle ABC with center $(2, 0)$ and scale factor 3.
- c. Draw the dilation of triangle ABC with center $(2, 0)$ and scale factor $\frac{1}{2}$.
- d. What are the coordinates of the image of point C when triangle ABC is dilated with center $(2, 0)$ and scale factor s ?
- e. Write an equation for the line containing all possible images of point C .

4. Here are some line segments.



- a. Which segment is a dilation of \overline{BC} using A as the center of dilation and a scale factor of $\frac{2}{3}$?
- b. Which segment is a dilation of \overline{BC} using A as the center of dilation and a scale factor of $\frac{3}{2}$?
- c. Which segment is not a dilation of \overline{BC} , and how do you know?