

Unit 2 Lesson 12: Using Equations for Lines

1 Missing center (Warm up)

Student Task Statement

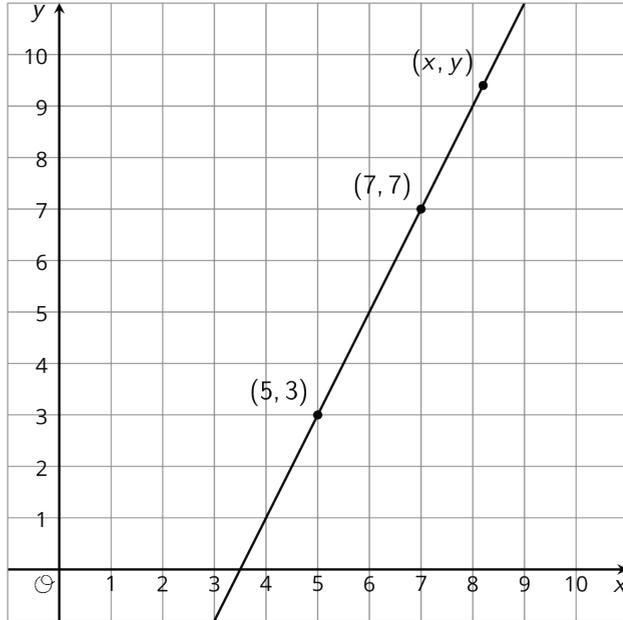
A dilation with scale factor 2 sends A to B . Where is the center of the dilation?



2 Writing Relationships from Two Points

Student Task Statement

Here is a line.

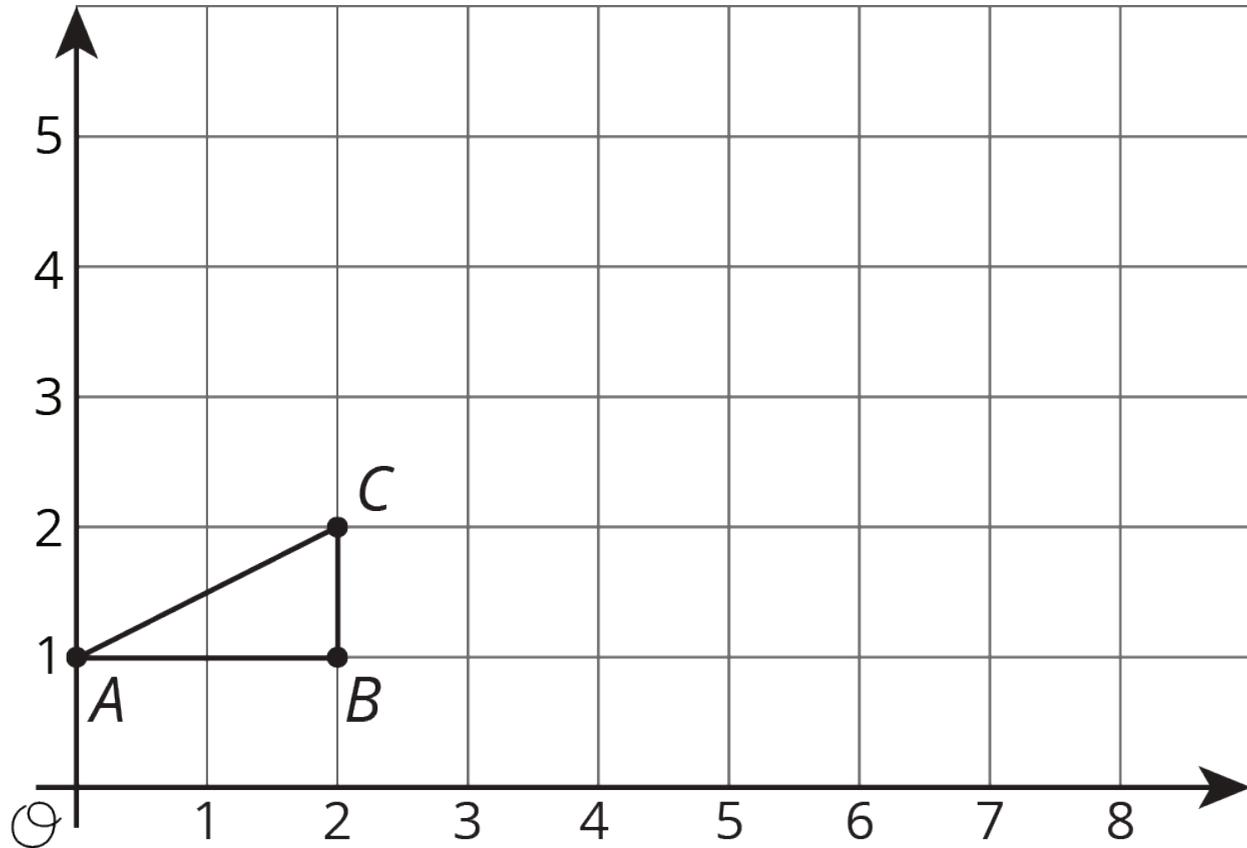


1. Using what you know about similar triangles, find an equation for the line in the diagram.
2. What is the slope of this line? Does it appear in your equation?
3. Is (9, 11) also on the line? How do you know?
4. Is (100, 193) also on the line?

3 Dilations and Slope Triangles

Student Task Statement

Here is triangle ABC .



1. Draw the dilation of triangle ABC with center $(0, 1)$ and scale factor 2.
2. Draw the dilation of triangle ABC with center $(0, 1)$ and scale factor 2.5.
3. Where is C mapped by the dilation with center $(0, 1)$ and scale factor s ?
4. For which scale factor does the dilation with center $(0, 1)$ send C to $(9, 5.5)$? Explain how you know.

Images for Activity Synthesis

