The following lesson plan is adapted from the problem below:
Big Ideas Math Course 3, Section 4.2 *Activity 2: Using Similar Triangles* page 149.

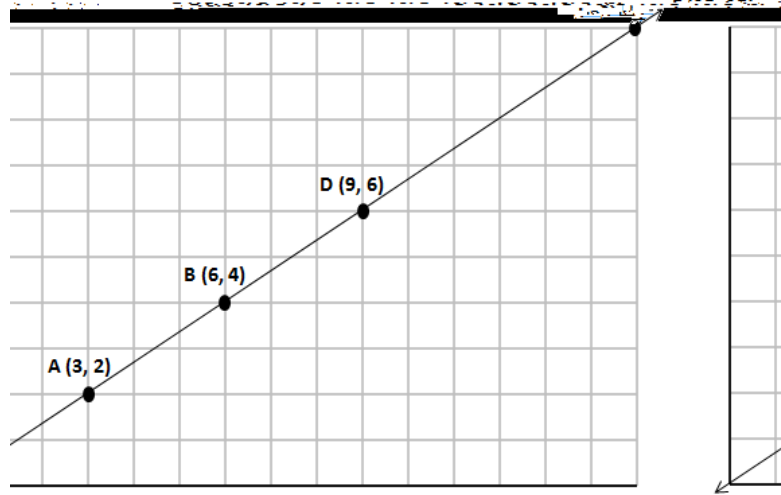# 8th Grade: Exploring Slope Using Similar Triangles

Standard(s)

8.EE.6

Use similar triangles to explain why the slope *m*

Adapted from:
Big Ideas Math Course 3, Section 4.2

D (9, 6)

B (6, 4)

A (3, 2)

1) Using the points A, B, D, and E, draw two right triangles so that their hypotenuses are on the line.
   a. What do you *predict* the ratios of their vertical side lengths to horizontal side lengths will be?

   b. Find the ratios of the vertical side length to horizontal side length of both triangles.

2) What do you notice about all of the ratios you recorded?