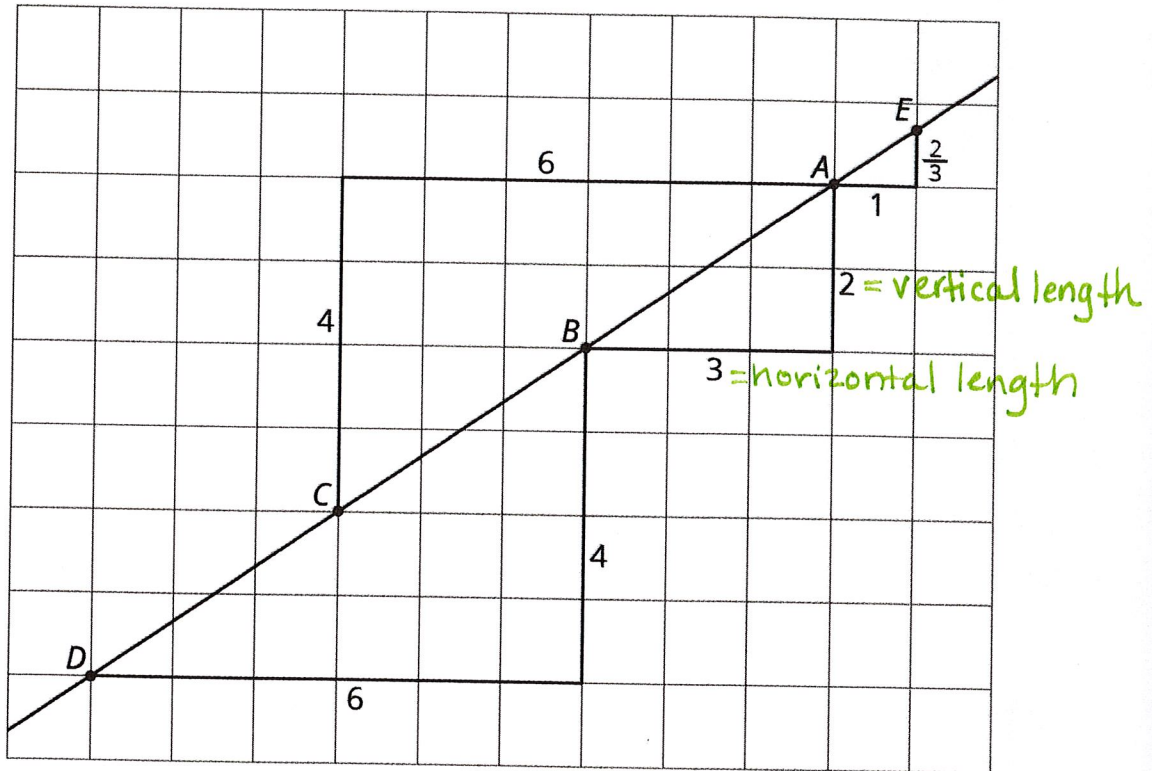


Unit 2  
Lesson 10 Summary

slope =  $\frac{\text{vertical length}}{\text{horizontal length}}$

Here is a line drawn on a grid. There are also four right triangles drawn. Do you notice anything the triangles have in common?



These four triangles are all examples of slope triangles. One side of a slope triangle is on the line, one side is vertical, and another side is horizontal. The **slope** of the line is the quotient of the length of the vertical side and the length of the horizontal side of the slope triangle. This number is the same for all slope triangles for the same line because all slope triangles for the same line are similar.

In this example, the slope of the line is  $\frac{2}{3}$ , which is what all four triangles have in common. Here is how the slope is calculated using the slope triangles:

you can use any 2 pts to find slope of a line

- Points A and B give  $2 \div 3 = \frac{2}{3}$
- Points D and B give  $4 \div 6 = \frac{2}{3}$
- Points A and C give  $4 \div 6 = \frac{2}{3}$
- Points A and E give  $\frac{2}{3} \div 1 = \frac{2}{3}$

Lesson 10 Glossary Terms

- slope

- \* Lines with same slope are parallel
- \* Looking left to right across the graph, if the slope of the line increases, the steepness of the line increases.