

Final Lift



Slippery Slope

Abby draws a triangle (*Triangle ABC*) like the triangles drawn by Maria, Diego and Sam. She ends up with a different slope.

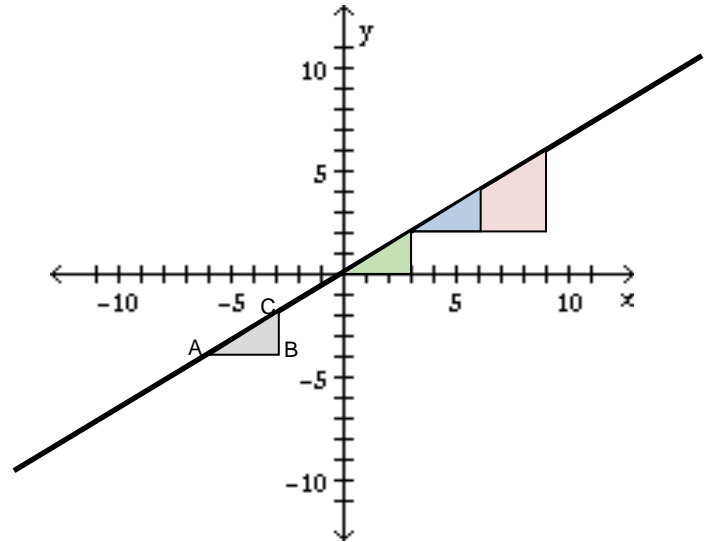
point a (-6,-4)

point C (-3,-2)

change in $x = -6 - 3 = -9$

change in $y = -4 - -2 = -6$

slope = $-9 \div -6 = -1.5$

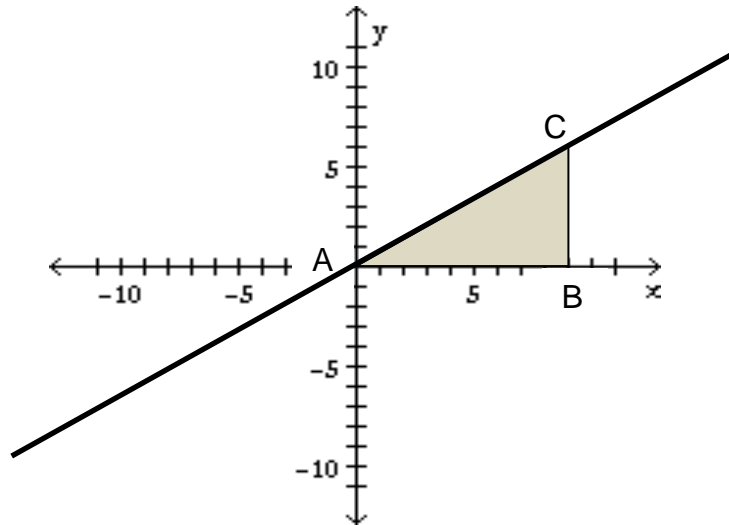


1. Is Abby's work correct? YES NO
2. Explain why you think she is correct or incorrect. Provide as much evidence as possible to support your answer.

¹ **Inspiration for Task:** The *Slippery Slope* Workout and Final Stretch have been adapted from Illustrative Mathematics materials, particularly the [Slopes Between Points on a Line](#) task, accessed on 5/1/2014, and is licensed by [Illustrative Mathematics](#) under [CC BY-NC-SA 4.0](#). The *Slippery Slope* challenge question has been adapted from Georgia Department of Education's Common Core Georgia Performance Standards Framework, Unit 5 [What's My Line](#) task accessed on January 23, 2014. According to the [Bureau of Labor Statistics](#), the average wage for a fast food worker in 2012 was \$8.84 per hour. We have revised this average slightly to make numbers more approachable for students.

Challenge

3. Using a ruler, draw a line **parallel** to Line AC. Label this new line **Line DF**. Draw a new slope triangle so that the hypotenuse of the new slope triangle is on **Line DF**. Label this new **Triangle DEF**.



4. Use **Triangle DEF** to calculate the slope of **Line DF**. Please show your work.

Slope of **Line DF** =

5. Are the triangles ABC and DEF similar to each other? How do you know?

¹ **Inspiration for Task:** The *Slippery Slope* Workout and Final Stretch have been adapted from Illustrative Mathematics materials, particularly the [Slopes Between Points on a Line](#) task, accessed on 5/1/2014, and is licensed by [Illustrative Mathematics](#) under [CC BY-NC-SA 4.0](#). The *Slippery Slope* challenge question has been adapted from Georgia Department of Education's Common Core Georgia Performance Standards Framework, Unit 5 [What's My Line](#) task accessed on January 23, 2014. According to the [Bureau of Labor Statistics](#), the average wage for a fast food worker in 2012 was \$8.84 per hour. We have revised this average slightly to make numbers more approachable for students.

6. If triangle ABC is similar to triangle DEF, what must be true about angle A and angle D? Why?

7. The slope of Line AC is (Circle one of the choices below):

less than the slope of Line DF

the same as the slope of Line DF

greater than the slope of Line DF?

Explain why you circled the answer above

¹ **Inspiration for Task:** The *Slippery Slope* Workout and Final Stretch have been adapted from Illustrative Mathematics materials, particularly the [Slopes Between Points on a Line](#) task, accessed on 5/1/2014, and is licensed by [Illustrative Mathematics](#) under [CC BY-NC-SA 4.0](#). The *Slippery Slope* challenge question has been adapted from Georgia Department of Education's Common Core Georgia Performance Standards Framework, Unit 5 [What's My Line](#) task accessed on January 23, 2014. According to the [Bureau of Labor Statistics](#), the average wage for a fast food worker in 2012 was \$8.84 per hour. We have revised this average slightly to make numbers more approachable for students.