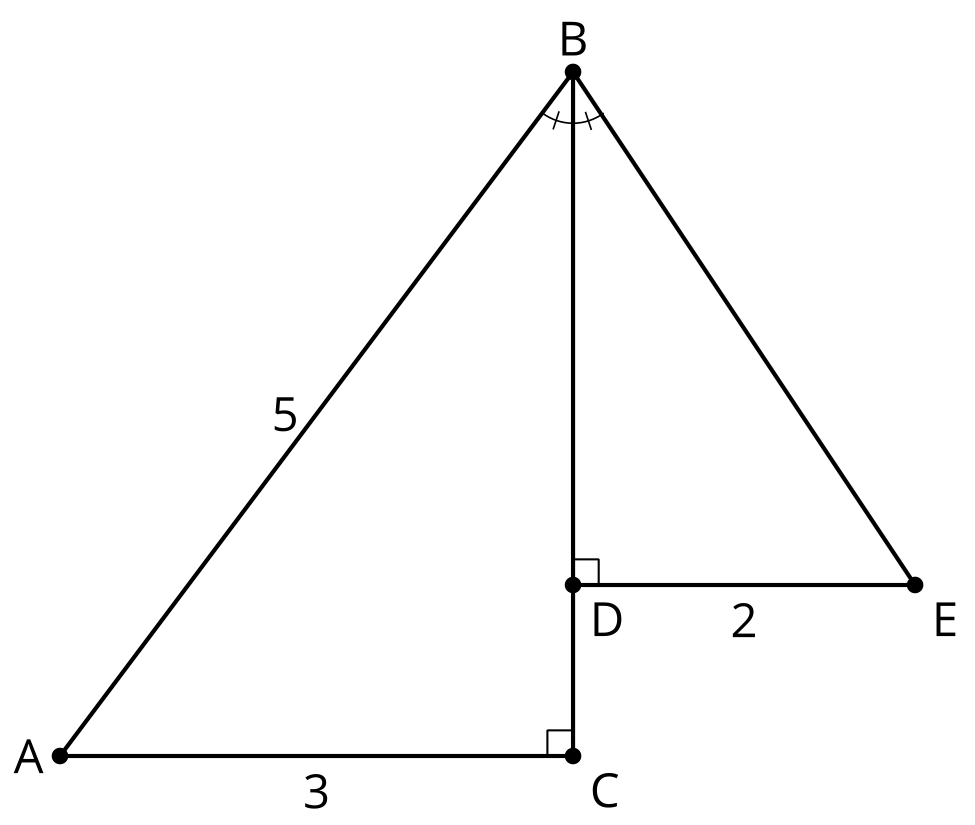
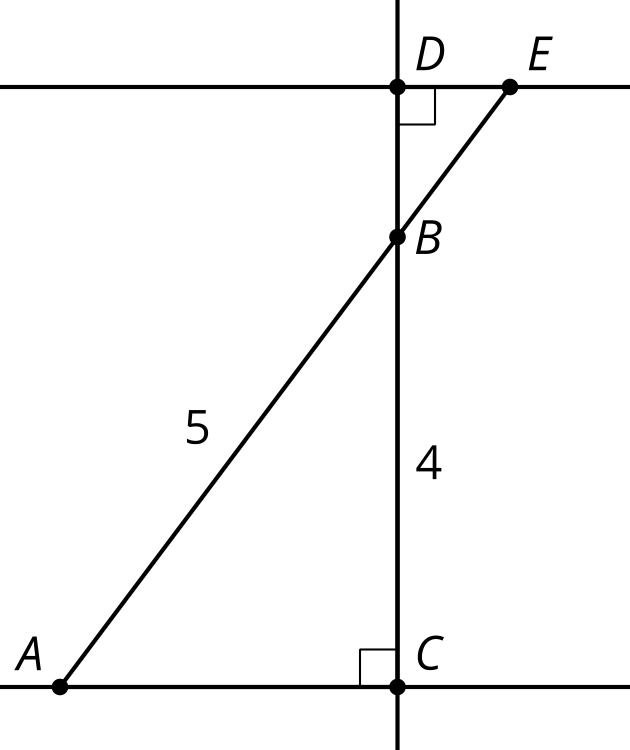
### Lesson 15 Practice Problems

1. In the right triangles shown, the measure of angle is the same as the measure of angle .  ​​​What is the length of side ?

* 

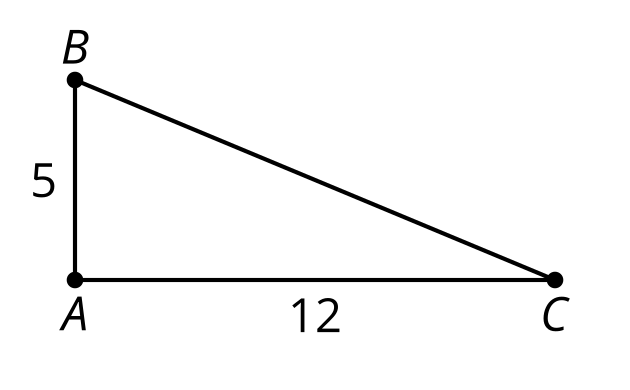
1. In right triangle , angle is a right angle, , and . What is the length of ?
2. In this diagram, lines and are parallel, and line is perpendicular to each of them. What is a reasonable estimate for the length of side ?

* , ,
* 
  1. 1
  2. 5

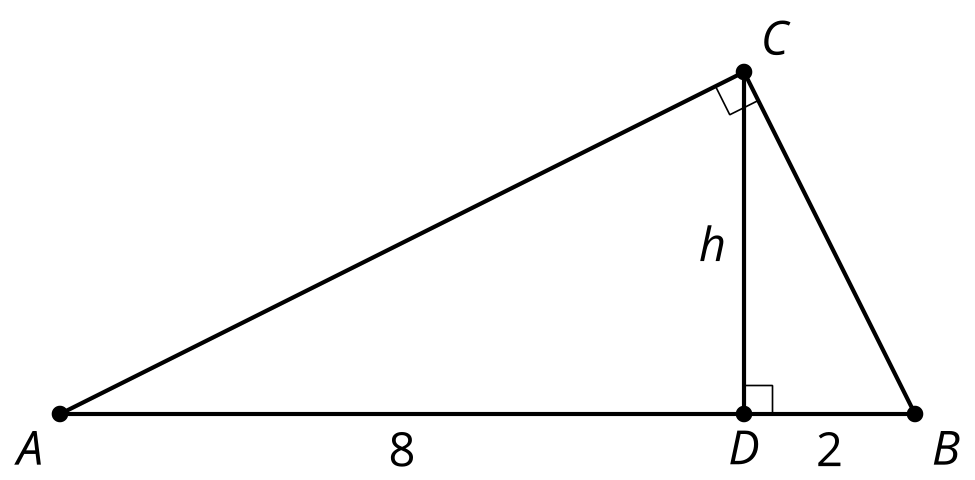
1. Select **all** of the right triangles.
   1. Triangle with , , and
   2. Triangle with , , and
   3. Triangle with , , and
   4. Triangle with , , and
   5. Triangle with , , and

* (From Unit 3, Lesson 14.)

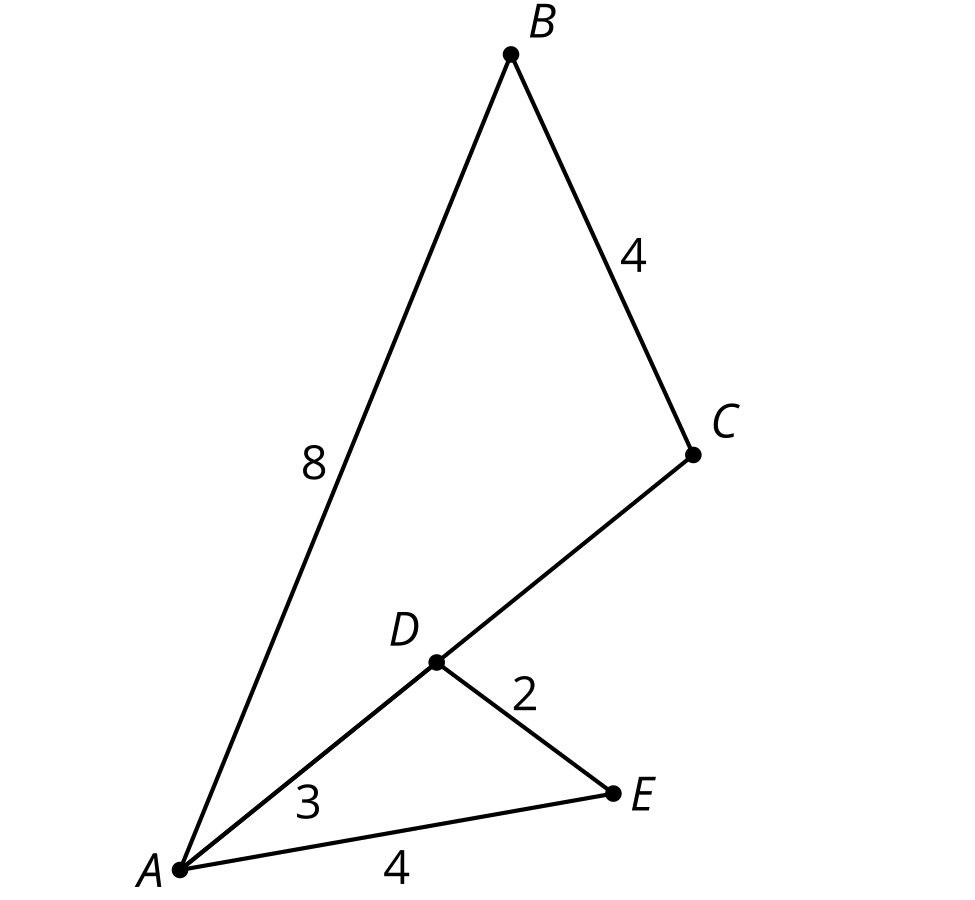
1. Andre says he can find the length of the third side of triangle and it is 13 units. Mai disagrees and thinks that the side length is unknown. Who do you agree with? Show or explain your reasoning.

* 
* (From Unit 3, Lesson 14.)

1. In right triangle , altitude with length is drawn to its hypotenuse. We also know and . What is the value of ?

* 
* (From Unit 3, Lesson 13.)

1. Select the sequence of transformations of triangle that would show that triangles and are similar. The length of is 6.

* 
  1. Dilate from center by a scale factor of , then reflect over line .
  2. Dilate from center by a scale factor of , then rotate 60º around angle .
  3. Translate by directed line segment , then reflect over line .
  4. Dilate from center by a scale factor of , then reflect over line .
* (From Unit 3, Lesson 7.)



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