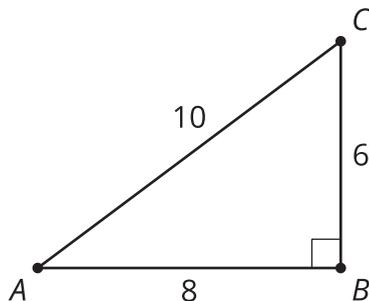


## Lesson 2 Practice Problems

1. Which of the following is true?



A.  $\sin(A) = \frac{6}{10}$

B.  $\cos(A) = \frac{6}{10}$

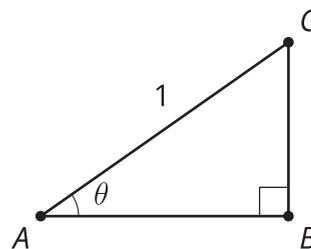
C.  $\sin(C) = \frac{6}{10}$

D.  $\cos(C) = \frac{8}{10}$

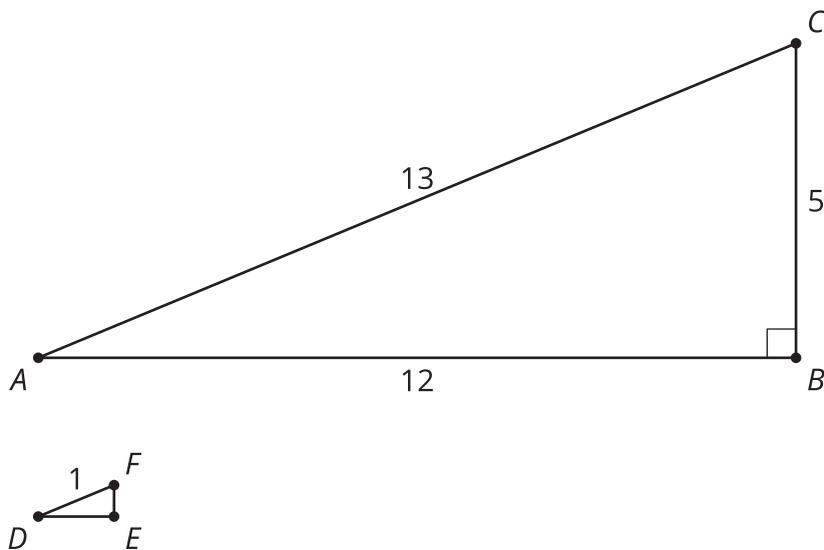
2. Here is triangle ABC:

a. Express the length of segment  $AB$  using sine or cosine.

b. Express the length of segment  $BC$  using sine or cosine.



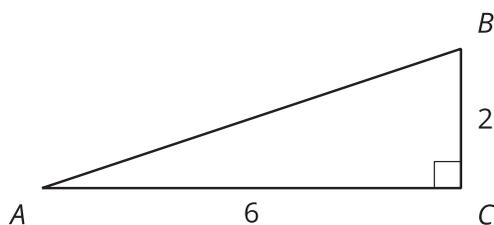
3. Triangle DEF is similar to triangle ABC.



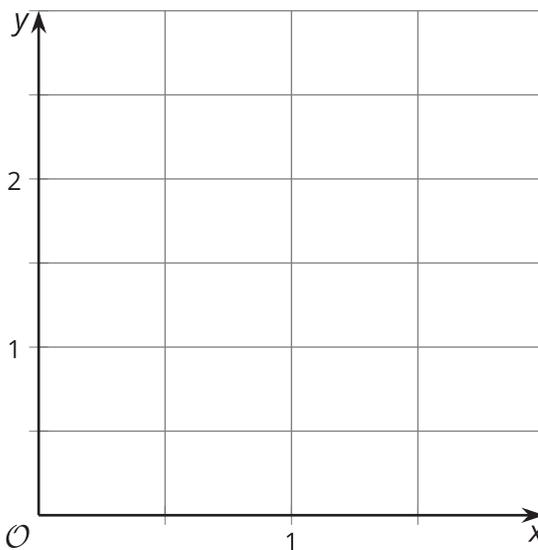
- a. What is the length of segment  $DE$ ? What is the length of segment  $EF$ ? Explain how you know.
- b. Explain why the length of segment  $DE$  is  $\cos(D)$  and the length of segment  $EF$  is  $\sin(D)$ .

4. Here is a triangle.

Find  $\cos(A)$ ,  $\sin(A)$ , and  $\tan(A)$ . Explain your reasoning.



5. Sketch and label a right triangle  $ABC$  with  $\tan(A) = 2$ .



6. The point  $(1, 4)$  lies on a circle with center  $(0, 0)$ . Name at least one point in each quadrant that lies on the circle.

(From Unit 6, Lesson 1.)