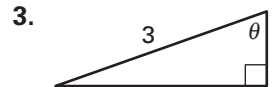
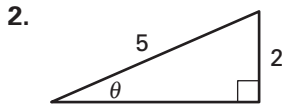
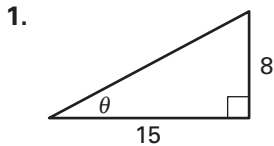


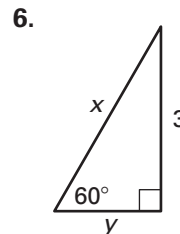
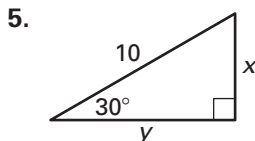
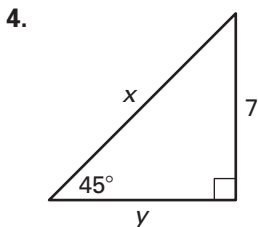
**Practice B**

For use with pages 769–775

Evaluate the six trigonometric functions of the angle  $\theta$ .



Find the missing side lengths  $x$  and  $y$ .



Use a calculator to evaluate the trigonometric function. Round the result to four decimal places.

7.  $\cos 27^\circ$

8.  $\tan 5^\circ$

9.  $\sin 48^\circ$

10.  $\cot 81^\circ$

11.  $\csc 23^\circ$

12.  $\sec 66^\circ$

13.  $\cot 13^\circ$

14.  $\sin 32^\circ$

Solve  $\triangle ABC$  using the diagram and the given measurements.

15.  $A = 46^\circ, b = 8$

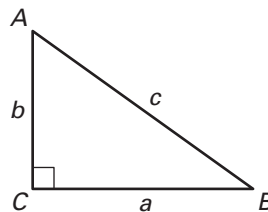
16.  $B = 24^\circ, c = 13$

17.  $B = 18^\circ, c = 10$

18.  $A = 55^\circ, a = 20$

19.  $B = 70^\circ, a = 6$

20.  $A = 7^\circ, b = 18$



21. **Flagpole** You are standing 25 feet from the base of a flagpole. The angle of elevation to the top of the flagpole is  $30^\circ$ . What is the height of the flagpole to the nearest tenth?

22. **Mount Fuji** Mt. Fuji in Japan is approximately 12,400 feet high. Standing several miles away, you estimate the angle of elevation to the top of the mountain is  $30^\circ$ . Approximately how far away are you from the base of the mountain?