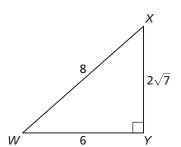
9.6 P

Practice B

In Exercises 1 and 2, determine which of the two acute angles has the given trigonometric ratio.

- **1.** The cosine of the angle is $\frac{3}{4}$.
- **2.** The tangent of the angle is $\frac{3\sqrt{7}}{7}$.



In Exercises 3–5, let $\angle H$ be an acute angle. Use a calculator to approximate the measure of $\angle H$ to the nearest tenth of a degree.

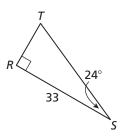
3.
$$\sin H = 0.41$$

4.
$$\cos H = 0.05$$

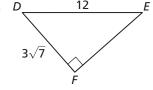
5.
$$\tan H = 5.18$$

In Exercises 6–8, solve the right triangle. Round decimal answers to the nearest tenth.

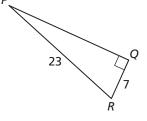
6.



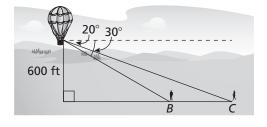
7.



8.



- **9.** You are in a hot air balloon that is 600 feet above the ground. You can see two people. The angles of depression to person B and to person C are 30° and 20°, respectively.
 - **a.** How far is person *B* from the point on the ground below the hot air balloon?
 - **b.** How far is person *C* from the point on the ground below the hot air balloon?
 - **c.** How far apart are the two people?



- **10.** On a *typographic map*, the contour lines show changes in elevation of the land. You and a friend are hiking on Kasatochi Island.
 - **a.** Find the difference in elevation (in miles) between you and your friend.
 - **b.** Use a ruler to find the horizontal distance (in miles) between you and your friend.
 - **c.** What is the angle of elevation from you to your friend?

