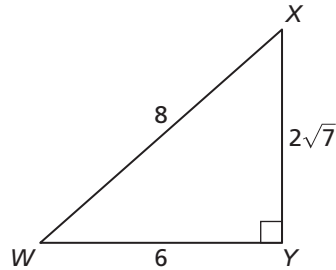


9.6

Practice B

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

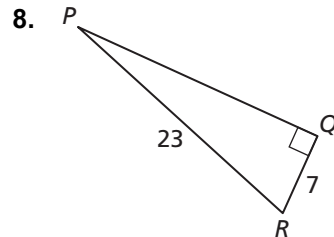
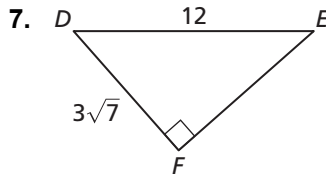
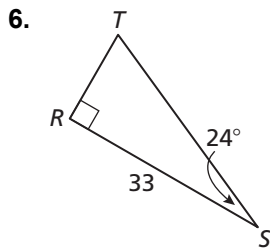
- The cosine of the angle is $\frac{3}{4}$.
- The tangent of the angle is $\frac{3\sqrt{7}}{7}$.



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.

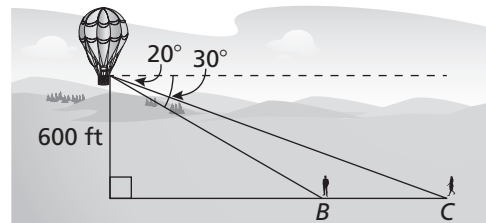
- $\sin H = 0.41$
- $\cos H = 0.05$
- $\tan H = 5.18$

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



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.

- How far is person B from the point on the ground below the hot air balloon?
- How far is person C from the point on the ground below the hot air balloon?
- 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.

- Find the difference in elevation (in miles) between you and your friend.
- Use a ruler to find the horizontal distance (in miles) between you and your friend.
- What is the angle of elevation from you to your friend?

