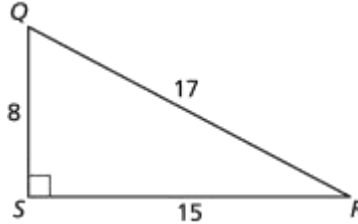


# HW 9.6

## Solving Right Triangles

In Exercises 1–3, determine which of the two acute angles has the given trigonometric ratio.

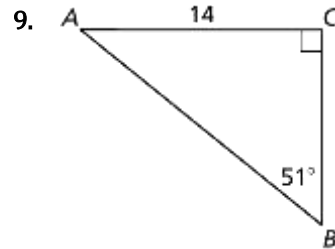
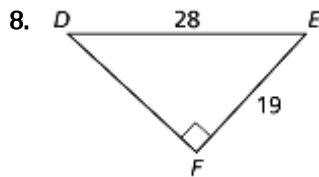
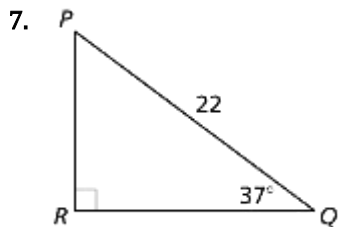
1. The sine of the angle is  $\frac{8}{17}$ .
2. The cosine of the angle is  $\frac{15}{17}$ .
3. The tangent of the angle is  $\frac{15}{8}$ .



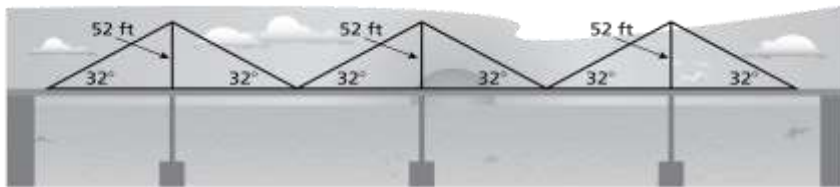
In Exercises 4–6, let  $\angle B$  be an acute angle. Use a calculator to approximate the measure of  $\angle B$  to the nearest tenth of a degree.

4.  $\sin B = 0.64$
5.  $\cos B = 0.12$
6.  $\tan B = 2.18$

In Exercises 7–9, solve the right triangle. Round decimal answers to the nearest tenth.



10. Use the diagram to find the distance across the suspension bridge. Round your answer to the nearest foot.



11. Use the diagram to find the acute angle formed by Washington Boulevard and Willow Way. Round your answer to the nearest tenth.

