5-2

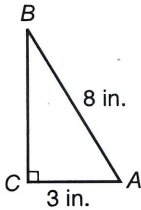## Practice

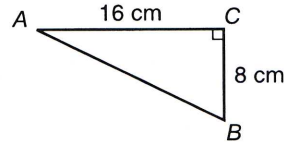# Trigonometric Ratios in Right Triangles

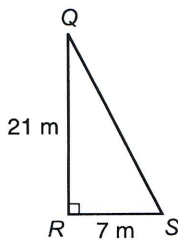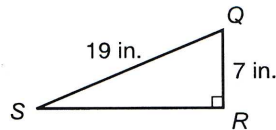**Find the values of the sine, cosine, and tangent for each ∠B.**

1.

2.

3. If $\tan \theta = 5$, find $\cot \theta$.

4. If $\sin \theta = \frac{3}{8}$, find $\csc \theta$.

Find the values of the six trigonometric ratios for each ∠S.

5.

6.

7. **Physics** Suppose you are traveling in a car when a beam of light passes from the air to the windshield. The measure of the angle of incidence is 55°, and the measure of the angle of refraction is 35° 15′. Use Snell's Law, $\frac{\sin \theta_i}{\sin \theta_r} = n$, to find the index of refraction n of the windshield to the nearest thousandth.