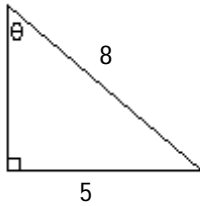


SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

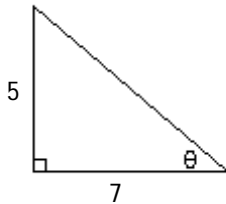
Find the value of the indicated trigonometric function of the angle θ in the figure. Rationalize the denominator where necessary.

1)



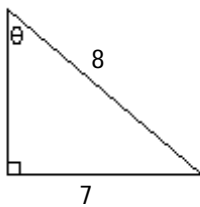
Find $\cos \theta$.

2)



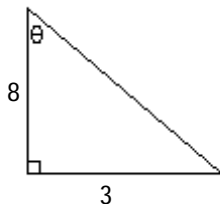
Find $\sin \theta$.

3)



Find $\tan \theta$.

4)



Find $\sec \theta$.

Use the given information to find the quadrant in which θ lies.

5) $\tan \theta > 0$ and $\sin \theta < 0$

6) $\cot \theta < 0$ and $\cos \theta > 0$

7) $\sec \theta < 0$ and $\tan \theta < 0$

8) $\sin \theta > 0$ and $\cos \theta > 0$

Use the Pythagorean identities to find the exact value of the expression.

9) Given $\sin t = \frac{2}{7}$ and $\cos t > 0$, find $\cos t$.

10) Given $\cos t = \frac{3}{5}$ and $\sin t < 0$, find $\sin t$.

11) Given $\sec t = -7$ and $\tan t < 0$, find $\tan t$.

12) Given $\tan t = -4$ and $\cos t > 0$, find $\sec t$.

Use the fundamental identities and appropriate algebraic operations to simplify the expression.

13) $\cos x (\csc x - \sec x) - \cot x$

14) $\frac{1 + \tan^2 x}{\sec x}$

15) $\frac{\cos^2 x}{\sin^2 x} + \cos x \sec x$