Trigonometry Worksheet 2 - Answers

1. If θ is angle between the line joining the origin and the point P(4,3) and x-axis, find $\csc \theta$.

$$\csc \theta = \frac{5}{3}$$
.

2. If θ is angle between the line joining the origin and the point P(-5,5) and x- axis, find $\tan \theta$.

$$\tan \theta = -1$$
.

3. If θ is angle between the line joining the origin and the point P(-9, -40) and x-axis, find $\cos \theta$.

$$\cos\theta = -\frac{9}{41}.$$

4. Give the signs of the six trigonometric functions for each angle $\frac{\pi}{6}$.

All six trigonometric functions are positive.

5. Give the signs of the six trigonometric functions for each angle $\frac{2\pi}{3}$.

Sine and cosecant are positive. Cosine, secant, tangent, and cotangent are all negative.

6. Give the signs of the six trigonometric functions for each angle $\frac{5\pi}{4}$.

Tangent and cotangent are positive. Sine, cosecant, cosine, and secant are all negative.

7. Give the signs of the six trigonometric functions for each angle $\frac{11\pi}{6}$.

Cosine and secant are positive. Sine, cosecant, tangent, and cotangent are all negative.

8. Given $\cos(\theta) = -\frac{3}{5}$ with θ in quadrant III, find $\tan \theta$.

$$\tan \theta = \frac{4}{3}$$

9. Given $\sin(\theta) = \frac{45}{53}$ with θ in quadrant III, find $\cos \theta$.

$$\cos\theta = -\frac{28}{53}$$

10. Given $tan(\theta) = \frac{3}{4}$ with θ in quadrant III, find $\sin \theta$.

$$\sin\theta = -\frac{4}{5}$$

©2012 Shmoop University, Inc. All rights reserved. For classroom use only. Want to print this out for your classroom? Go for it. All other reproduction and distribution is prohibited.