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 $\sin\theta$.

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