Finding Sine, Cosine, and Tangent for an Angle Given a Point on its Terminal Side Practice Problems

Evaluate sine, cosine, and tangent for the angle in standard position whose terminal side contains the given point.

1) (8, -15)

2) (-12, -5)

3) (7, 24)

4) (8, 15)

5) (-4, 1)

6) (3,1)

7) (4, -4)

Finding Sine, Cosine, and Tangent for an Angle Given a Point on its Terminal Side Practice Problems Answers

1) $\sin(\theta) = \frac{-15}{17}$ $\cos(\theta) = \frac{8}{17}$ $\tan(\theta) = \frac{-15}{8}$
2) $\sin(\theta) = \frac{-5}{13}$ $\cos(\theta) = \frac{-12}{13}$ $\tan(\theta) = \frac{5}{12}$
3) $\sin(\theta) = \frac{24}{25}$ $\cos(\theta) = \frac{7}{25}$ $\tan(\theta) = \frac{24}{7}$
4) $\sin(\theta) = \frac{15}{17}$ $\cos(\theta) = \frac{8}{17}$ $\tan(\theta) = \frac{15}{8}$
5) $\sin(\theta) = \frac{\sqrt{17}}{17}$ $\cos(\theta) = \frac{-4\sqrt{17}}{17}$ $\tan(\theta) = \frac{-1}{4}$
6) $\sin(\theta) = \frac{\sqrt{10}}{10}$ $\cos(\theta) = \frac{3\sqrt{10}}{10}$ $\tan(\theta) = \frac{1}{3}$
7) $\sin(\theta) = \frac{-\sqrt{2}}{2}$ $\cos(\theta) = \frac{\sqrt{2}}{2}$ $\tan(\theta) = -1$