

HW: Trig functions and any angle

Find the values of all six trigonometric functions of the angle whose terminal side passes through the given point. Leave all answers in fraction form.

1. (6,8)

$$\sin\theta = \frac{8}{10} \quad \csc\theta = \frac{10}{8} \quad \cos\theta = \frac{6}{10} \quad \sec\theta = \frac{10}{6} \quad \tan\theta = \frac{8}{6} \quad \cot\theta = \frac{6}{8}$$

2. (4,3)

$$\sin\theta = \frac{3}{5} \quad \csc\theta = \frac{5}{3} \quad \cos\theta = \frac{4}{5} \quad \sec\theta = \frac{5}{4} \quad \tan\theta = \frac{3}{4} \quad \cot\theta = \frac{4}{3}$$

3. (7,24)

$$\sin\theta = \frac{24}{25} \quad \csc\theta = \frac{25}{24} \quad \cos\theta = \frac{7}{25} \quad \sec\theta = \frac{25}{7} \quad \tan\theta = \frac{24}{7} \quad \cot\theta = \frac{7}{24}$$

4.  $(-\sqrt{3}, -1)$

$$\sin\theta = -\frac{1}{2} \quad \csc\theta = -2 \quad \cos\theta = -\frac{\sqrt{3}}{2} \quad \sec\theta = -\frac{2\sqrt{3}}{3} \quad \tan\theta = \frac{\sqrt{3}}{3} \\ \cot\theta = \sqrt{3}$$