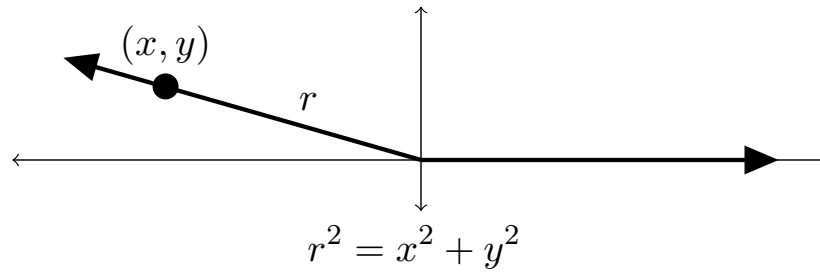


Trigonometric Functions of Any Angle

Angle θ is shown below in standard position. Point (x, y) is a point on the terminal side of θ , and r is the distance from $(0, 0)$ to (x, y) .



$$\sin(\theta) = \frac{y}{r} \quad \csc(\theta) = \frac{r}{y}$$

$$\cos(\theta) = \frac{x}{r} \quad \sec(\theta) = \frac{r}{x}$$

$$\tan(\theta) = \frac{y}{x} \quad \cot(\theta) = \frac{x}{y}$$