

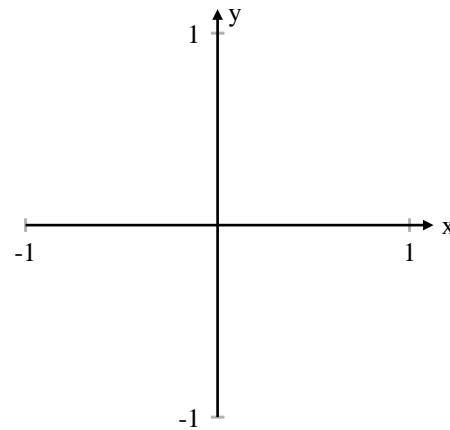
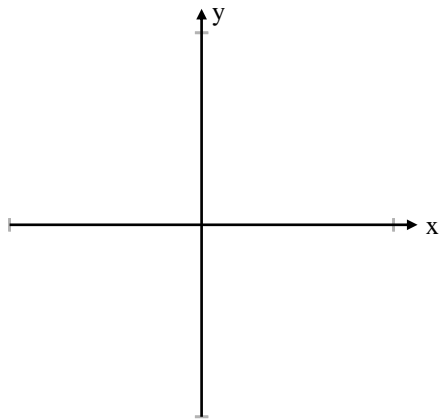
### 4.3 Trigonometry Extended: The Circular Functions

#### Trigonometric Functions of Angles Other Than Positive and Acute

An angle is formed

The measure of the angle is from

**Coterminal Angles:**

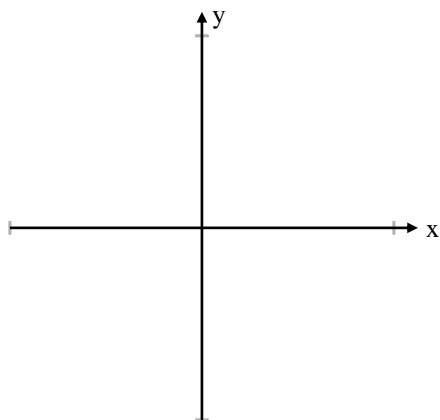
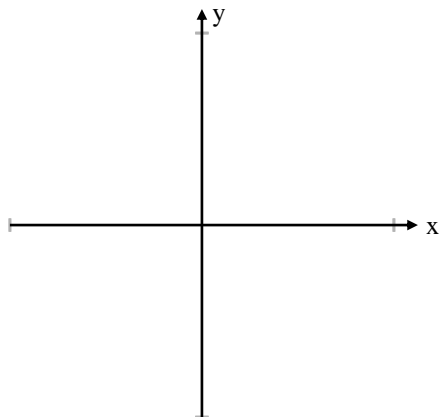


### 4.3 Trigonometry Extended: The Circular Functions

1. Identify the one angle that is not coterminal with all the others.

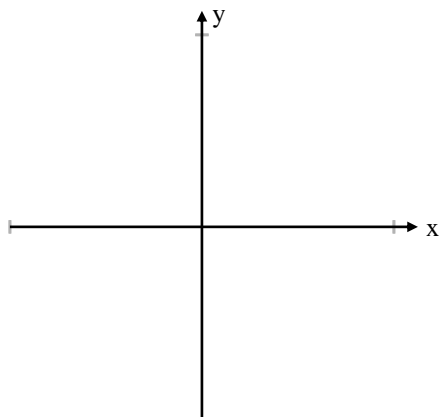
$$70^\circ, -290^\circ, 430^\circ, 790^\circ, 610^\circ$$

2. Trigonometric functions of any angle  $\theta$ .



3. Point P is on the terminal side of angle  $\theta$ . Evaluate the six trigonometric functions.

$$P(-4, 2)$$



### 4.3 Trigonometry Extended: The Circular Functions

4. State the sign (+ or -) of (a).  $\sin t$ , (b).  $\cos t$ , (c).  $\tan t$  for values of  $t$  in the interval given.

$$\left( \pi, \frac{3\pi}{2} \right)$$

5. Determine the sign (+ or -) of the given value without the use of a calculator.

$$\cos 215^\circ$$

$$\tan \frac{4\pi}{5}$$

6. Determine Evaluate without using a calculator by using ratios in a reference triangle.

$$\csc \frac{3\pi}{4}$$

$$\cot \frac{13\pi}{4}$$