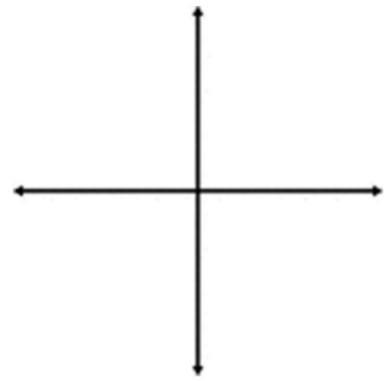
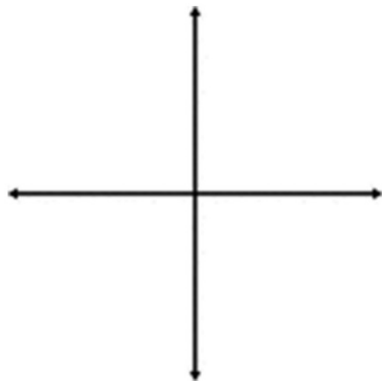


Bellwork

Graph the given angles in standard position:

1. 1500°

2. $\frac{20\pi}{6}$



Identify how many degrees are between the terminal side and the closest x-axis for each of the above angles.

Review of Vital Concepts

Direction of Rotation:

Positive - Counter Clockwise

Negative - Clockwise

Starting Point:

Place your pencil on the initial side and rotate in the appropriate direction.

Changing Radians to Degrees:

Multiply by $\frac{180}{\pi}$

Reference Angles

Definition:

The smallest angle between the terminal side and the x-axis.

Usefulness:

The values of the trigonometric functions are the same as the trigonometric values for the reference angles; give or take a minus sign.

Finding Reference Angles

Procedure:

1. Graph the given angle in standard position.
2. Draw a line connecting the terminal side to the x-axis:
 - A. Terminal side in QI or QII
Then draw a line going down.
 - B. Terminal side in QIII or QIV
Then draw a line going up.
3. Find the measure of the angle between the x-axis and the terminal side.

Examples

Find the Reference Angle of each of the given angles:

1. -1250°

2. $\frac{31\pi}{5}$

