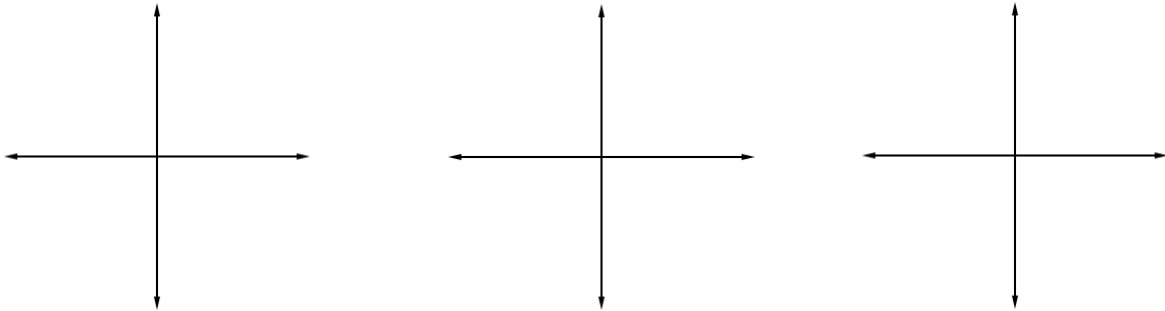


Lesson 6.1: Angle Measure

The _____ of an angle is how much the angle _____ .

Angles can be measured in _____ or _____ .

The measure of an angle in _____ is the length of the _____ that subtends the angle.

Examples:**The Relationship Between Radians and Degrees****Examples:**

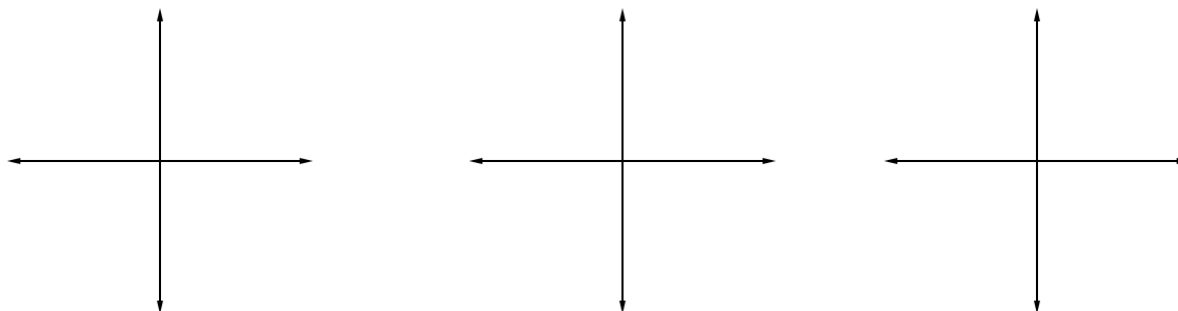
1. Express 120° in radians

2. Express $\frac{2\pi}{7}$ in degrees.

Angles in Standard Position

An angle is drawn in standard position if it is drawn in the _____ with its vertex at the _____ and its initial side is on the positive _____ .

Examples:



Two angles in standard position are _____ if their sides coincide.

Examples:

1. Find the angles that are co-terminal with the angle $\theta = 30^\circ$ in standard position.

2. Find the angles that are co-terminal with the angle $\theta = \frac{\pi}{3}$ in standard position.

Length of a Circular Arc

Example:

1. Find the length of an arc of a circle with radius 10 m that subtends a central angle of 30° .

2. A central angle θ in a circle of radius 4 m is subtended by an arc length of 6 m. Find the measure of θ in radians.

Area of a Circular Sector

Example: Find the area of a sector of a circle with a central angle 60° if the radius of the circle is 3 m.