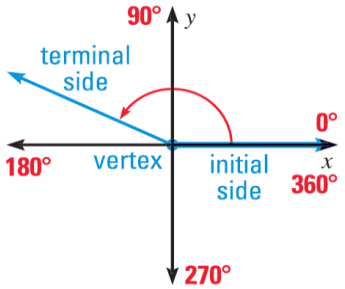
Algebra 2

10-02 Angles and Radian Measure

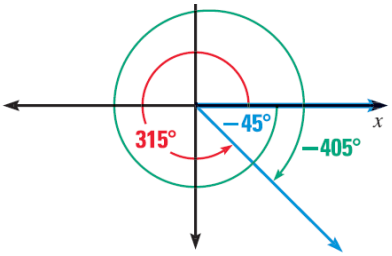
Angles in Standard Position



- Vertex on _____
- Initial Side on _____
- Measured _____

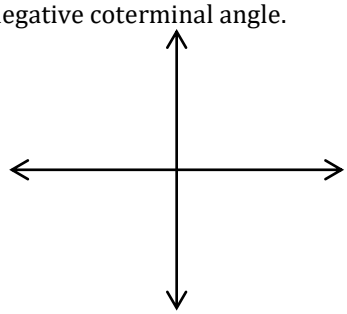
Coterminal Angles

- Different angles (_____) that have the same _____
- Found by adding or subtracting multiples of _____

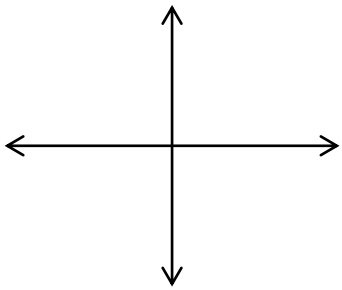


Draw an angle with the given measure in standard position. Then find one positive coterminal angle and one negative coterminal angle.

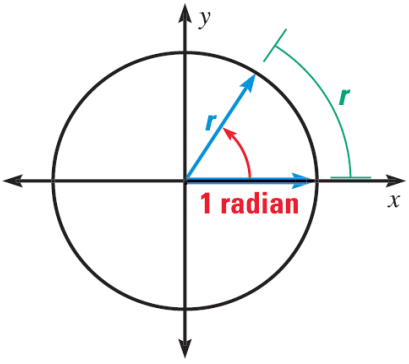
65°



−900°



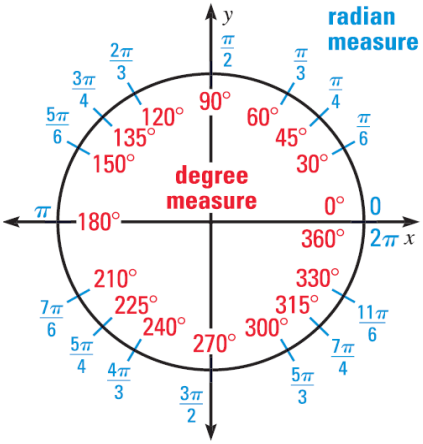
Radian measure



- Another _____ to measure _____
- 1 radian is the angle when the _____ = the _____
- There are _____ radians in a circle

- To convert between degrees and radians use fact that
- 180° = _____

Special angles



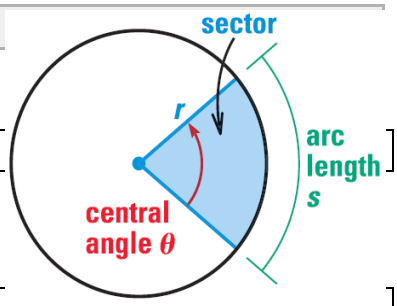
Convert the degree measure to radians, or the radian measure to degrees.

135°

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

Sector

- _____ of a circle



Arc Length

$$s = r\theta$$

θ must be in radians!

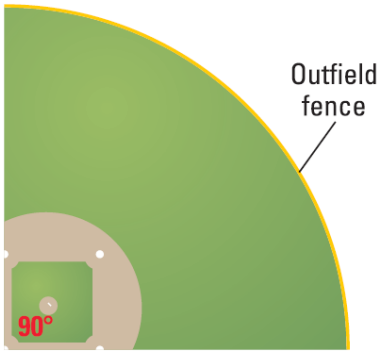
Area of Sector

$$A = \frac{1}{2}r^2\theta$$

θ must be in radians!

Find the length of the outfield fence if it is 220 ft from home plate.

Find the area of the baseball field.



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