

## Vocabulary: Radians



### Vocabulary

- Arc – a piece of a circle.
  - For example,  $BC$  is an arc of the circle shown to the right.
- Central angle – an angle with a vertex at the center of a circle.
  - For example,  $\angle BAC$  is a central angle of the circle shown to the right.
- Circumference – the distance around a circle.
- Radian – a unit of angle measure that expresses how many radii fit along the arc intercepted by the angle.
  - For any circle, exactly  $2\pi$  radii fit along the circumference of the circle, so 1 full rotation ( $360^\circ$ ) =  $2\pi$  radians.
  - Because  $2\pi$  radians =  $360^\circ$ , it follows that 1 radian =  $\frac{360^\circ}{2\pi}$ , or about  $57.3^\circ$ .
  - An angle of 1 radian intercepts an arc that is exactly the same length as 1 radius.
- Radius – a line segment with one endpoint at the center of a circle and the other endpoint on the circle.

