Arc Length and Degrees to Radians

Degrees to Radians

Multiply the degree by $\pi/180$

Radians to degrees

Multiply radian by $180/\pi$

1.What is 150° in radians

2. What is 255° in radians

3. What is 120° in radians

4.What is $4\pi/3$ in degrees

5.What is $2\pi/3$ in degrees

6. What is $11\pi/6$ in degrees

Arc Length

Formula: $S = r \times \theta$

*Theta HAS to be in RADIANS

1. If a circle has a radius of 16.40cm find the arc length of the two degrees below.

   A) $5\pi/4$

   B) 175°

   C) $3\pi/2$

Area of a Sector

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

* Theta HAS to be in RADIANS

If a circle has a radius of 25.60inch, what is the Area of the sector if is $\theta = 20°$?

If a circle has a radius of 34.53cm, what is the area of the sector if is $\theta = 45°$?