

# Converting Angle Measurements

On the unit circle, the angles are given in degrees. Another way to measure an angle is with radians.  $\pi$  Radians =  $180^\circ$ . The two unit conversions are as follows:

| radians to degrees      | degrees to radians      |
|-------------------------|-------------------------|
| $\frac{180^\circ}{\pi}$ | $\frac{\pi}{180^\circ}$ |

Convert the angle from degrees to radians, leaving your answer as a fraction.

**Example:**  $90^\circ$     Simply multiply.     $\frac{90^\circ}{1} \times \frac{\pi}{180^\circ} = \frac{90^\circ \pi}{180^\circ} = \frac{1}{2} \pi$

1.  $310^\circ$

2.  $150^\circ$

3.  $30^\circ$

4.  $420^\circ$

5.  $120^\circ$

6.  $350^\circ$

Convert from radians to degrees.

**Example:**  $\frac{3}{2}\pi$     Simply multiply.     $\frac{3}{2}\pi \times \frac{180^\circ}{\pi} = \frac{540^\circ}{2} = 270^\circ$

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

2.  $4\pi$

3.  $\frac{7}{6}\pi$

4.  $\frac{1}{6}\pi$

5.  $\frac{7}{4}\pi$

6.  $\frac{9}{2}\pi$