

RADIAN MEASURE

_____ measure is the _____ of the length of an arc intercepted by a _____ and the _____ of the circle.

Given: $C = 2\pi r$

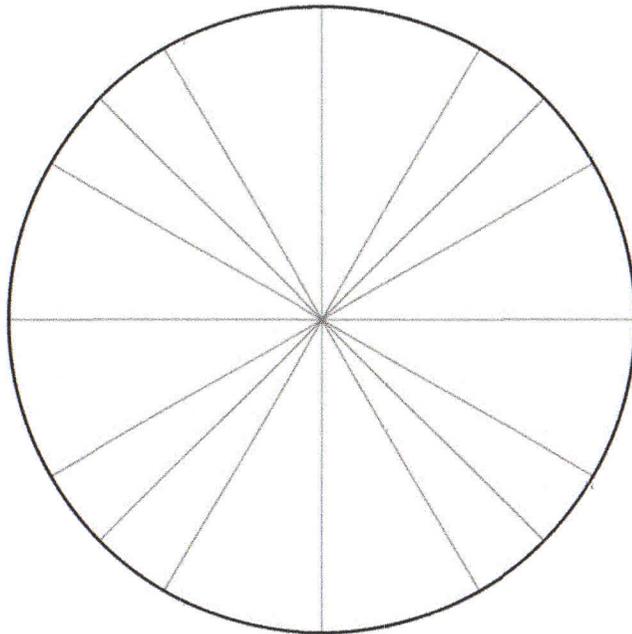
If $r = 1$, then $C = 2\pi(1)$ or $C = \underline{\hspace{2cm}}$

Since 360° is one full rotation around the circle, then $360^\circ = \underline{\hspace{2cm}}$.

$\frac{1}{4}$ of the way around the circle is $\frac{1}{4}(360^\circ) = \underline{\hspace{2cm}}$ or $\frac{1}{4}(2\pi) = \underline{\hspace{2cm}}$.

$\frac{1}{2}$ of the way around the circle is $\frac{1}{2}(360^\circ) = \underline{\hspace{2cm}}$ or $\frac{1}{2}(2\pi) = \underline{\hspace{2cm}}$.

$\frac{3}{4}$ of the way around the circle is $\frac{3}{4}(360^\circ) = \underline{\hspace{2cm}}$ or $\frac{3}{4}(2\pi) = \underline{\hspace{2cm}}$.



To convert degrees to _____, multiply by $\frac{\pi \text{ radians}}{180^\circ}$

To convert radians to _____, multiply by $\frac{180^\circ}{\pi \text{ radians}}$

RADIAN MEASURE

_____ measure is the _____ of the length of an arc intercepted by a _____ and the _____ of the circle.

Given: $C = 2\pi r$

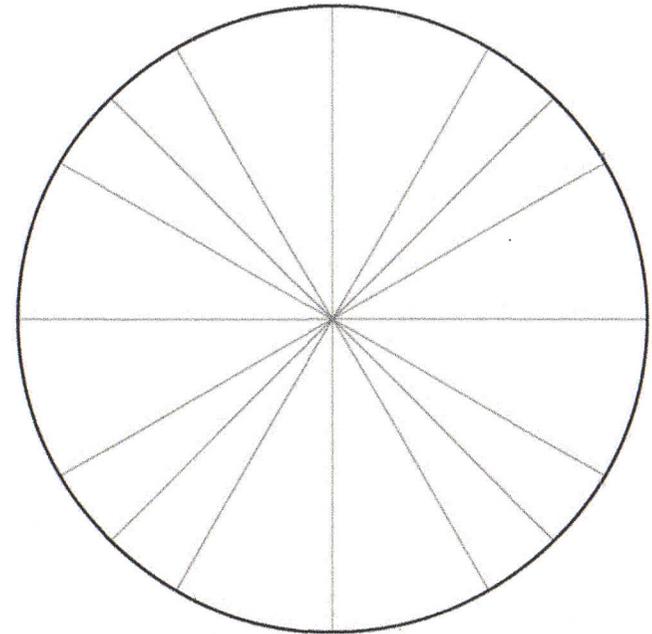
If $r = 1$, then $C = 2\pi(1)$ or $C = \underline{\hspace{2cm}}$

Since 360° is one full rotation around the circle, then $360^\circ = \underline{\hspace{2cm}}$.

$\frac{1}{4}$ of the way around the circle is $\frac{1}{4}(360^\circ) = \underline{\hspace{2cm}}$ or $\frac{1}{4}(2\pi) = \underline{\hspace{2cm}}$.

$\frac{1}{2}$ of the way around the circle is $\frac{1}{2}(360^\circ) = \underline{\hspace{2cm}}$ or $\frac{1}{2}(2\pi) = \underline{\hspace{2cm}}$.

$\frac{3}{4}$ of the way around the circle is $\frac{3}{4}(360^\circ) = \underline{\hspace{2cm}}$ or $\frac{3}{4}(2\pi) = \underline{\hspace{2cm}}$.



To convert degrees to _____, multiply by $\frac{\pi \text{ radians}}{180^\circ}$

To convert radians to _____, multiply by $\frac{180^\circ}{\pi \text{ radians}}$