

Section 2: Circular measure

Crucial points

1. **Make sure that your calculator is in the right mode**

Remember when you want to work out, say, $\sin \frac{\pi}{3}$, make sure your calculator is in 'rad' mode.

2. **Make sure that angles are in radians before using sector formulae**

The formulae for arc length ($r\theta$) and sector area ($\frac{1}{2}r^2\theta$) can only be used when the angle, θ , is in radians.

To change degrees to radians multiply by $\frac{\pi}{180^\circ}$.

3. **You must know the relationship between the radius and tangent of a circle**

Remember that the radius of a circle and the tangent to a circle meet at right angles.

4. **Remember about the small angle approximations**

These can be useful to approximate trigonometric functions, so that you can find the approximate solution to an equation. They will be important when you learn about differentiating and integrating trigonometric functions.