Section 2: The area of a sector

Crucial points

1. **Make sure you know how to find the area of a sector by integration**
   Remember that the area of a sector is found by integrating $\frac{1}{2}r^2$ with respect to θ.

2. **Be careful with integration, in particular when integrating cos²θ or sin²θ**
   Remember the use of the double angle identity to integrate $\cos^2\theta$ or $\sin^2\theta$.

3. **Make sure that you use the correct limits of integration**
   Always sketch the curve and use it to check the limits of the integration.