## Edexcel A level Mathematics Integration

## Section 1: Finding areas

## Crucial points

1. Make sure you get x's and y's the right way round, especially when finding an area between a curve and the $y$-axis
The area between a curve and the $y$-axis is given by $\int_{c}^{d} x \mathrm{~d} y$. You must express $x$ in terms of $y$ so that you can integrate with respect to $y$. Remember that the limits of the integration are $y$-values, not $x$-values.
2. Draw diagrams

Always sketch the curve (if you are not given a diagram) when you are finding an area, and shade the relevant region.

