

Area Between 2 Curves

- 1) Calculate the area bounded by the curves

$$\begin{aligned}y &= x^2 \\ y &= 50 - x^2\end{aligned}$$

- 2) Calculate the area bounded by the curves

$$\begin{aligned}y &= x^2 \\ y &= x^3\end{aligned}$$

HINT Be careful with your sketch. Perhaps use a table of values for both curves

- 3) Calculate the area bounded by the curves

$$\begin{aligned}y &= x^2 \\ y &= x^3\end{aligned}$$

~~The area~~ and the limits $x = 1$ $x = 2$

- 4) Calculate the area bounded by the curves

$$\begin{aligned}y &= x^2 + 1 \\ y &= x^3\end{aligned}$$

and the limits $x = 0$ $x = 1$.

HINT : Draw good graphs with a table of values.

- * 5) This is more advanced : but still need for A level

Calculate the area bounded between the curves

$$\begin{aligned}y &= x^3 + 1 \\ y &= (x+1)^2\end{aligned}$$