

Essential Skills 26

The skills in this series of worksheets appear frequently.

These are the GIFTS you must take to succeed



Definite Integrals

Evaluate each of the following:

1. $\int_0^2 2x - 3 dx$

2. $\int_0^3 3x^2 dx$

3. $\int_1^4 \sqrt{x} dx$

4. $\int_1^3 x^2 - 2x dx$

5. $\int_{-1}^2 \frac{2}{x^3} dx$

6. $\int_0^2 3x^2 + 2x + 1 dx$

7. $\int_1^4 \frac{x^2-1}{\sqrt{x}} dx$

8. $\int_1^2 (2x - 1)^3 dx$

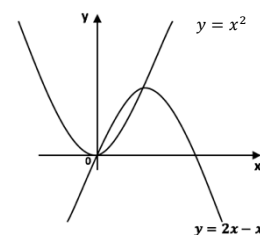
9. $\int_{-1}^1 \frac{dx}{(x-2)^2}$

10. $\int_0^{\pi} \sin 2x - \cos 2x dx$



APPLYING QUESTIONS

1. Calculate the area enclosed by the curves $y = x^2$ and $y = 2x - x^2$.



2. Find p given that $\int_1^p 3x^2 - 5x dx = 6$