

1. Find

$$\int (x^4 - 6x^2 + 7) dx$$

giving your answer in simplest form.

(3)

$$= \frac{x^{4+1}}{4+1} - \frac{6x^{2+1}}{2+1} + \frac{7x^{0+1}}{0+1} + c \quad (1 \text{ mark})$$

$$= \frac{x^5}{5} - \frac{6x^3}{3} + \frac{7x}{1} + c \quad (1 \text{ mark})$$

$$= \frac{x^5}{5} - 2x^3 + 7x + c \quad (1 \text{ mark})$$