

Integrate the following.

$$\int x^3 dx$$

$$\int x^7 dx$$

$$\int 4x^2 dx$$

Integrate the following.

$$\int 2x^3 + x^2 - 3 dx$$

$$\int (x + 2)(x + 4) dx$$

Integrate the following.

$$\int x^2(2x - 5) \, dx$$

$$\int \frac{1}{x^3} \, dx$$

$$\int \frac{1}{x^5} \, dx$$

Integrate the following.

$$\int \frac{5}{x^2} \, dx$$

$$\int \frac{x^4 + 4x^3 - 3}{x^2} \, dx$$

Integrate the following.

$$\int \sqrt{x} \, dx$$

$$\int \frac{x+1}{\sqrt{x}} \, dx$$

Integrate the following.

$$\int \sec^2 \theta + \sin \theta \, d\theta$$

$$\int \frac{\sin x}{\cos^2 x} \, dx$$

$$\int 2\theta - \cos \theta \, d\theta$$