Homework Questions 4 – Separate Integration

Integrate the following

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

2.
$$\int \sqrt{x} + \frac{3}{x^2} \ dx$$

3.
$$\int x(x - 4) \ dx$$

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

5.
$$\int (x - 4)(x + 2) \ dx$$

6.
$$\int \frac{x^3 - 3x}{4x} \ dx$$

7.
$$\int \frac{2}{\sqrt[3]{x}} + \frac{1}{\sqrt{x^3}} + 1 \ dx$$

8.
$$\int \sqrt[3]{x} + 3\sqrt{x} \ dx$$

9.
$$\int \frac{\sqrt{x} + 2x^4}{x^2} \ dx$$

10.
$$\int (\sqrt{x} + 3)^2 \ dx$$