

$$= 0.398x = 1.398$$

$$0.398$$

$$0.398$$

$$x = \frac{1.398}{0.398}$$

$$x = 3.513$$

$$5x + 6 = 2x + 1$$

$$5x - 2x = 1 - 6$$

$$3x = -5 \quad \Rightarrow x = -\frac{5}{3}$$

$$x = -\frac{5}{3} \text{ or } -1.67$$

$$6. (i) \int x^4 + 3x^2 - 3x + 1 \, dx$$

$$\int \frac{x^5}{5} + \frac{3x^3}{3} - \frac{3x^2}{2} + x$$

$$\int \frac{x^5}{5} + x^3 - \frac{3x^2}{2} + x + c$$

$$(ii) \int (x-1)(2x-3) \, dx$$

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

$$\int \frac{x^3}{3} - \frac{3x^2}{2} - 1 + c$$

$$(iii) \int 3 \sec^2 2x \, dx$$

$$3 \int \sec^2 2x \, dx$$

$$3 \int \frac{1}{2} \tan^2 2x \, dx$$

$$3 \times \frac{1}{2} \tan^2 2x$$

$$(iv) \int_0^4 (x+3)(x+2) \, dx$$

$$\int_0^4 x^2 + 2x + 3x + 6 \, dx$$

$$\int_0^4 x^2 + 5x + 6 \, dx$$