

Worksheet
Integration: Partial Fractions

1. $\int \frac{4x^2 - x - 6}{x(x-1)(x+2)} dx$

2. $\int \frac{2x^2 - 5x}{(x+2)(x-1)^2} dx$

3. $\int \frac{2x^3 + x^2 - x - 6}{x^3(x+2)} dx$

4. $\int \frac{3x^3 - 2x^2 - 14x - 14}{(x+2)^2(x-1)^2} dx$

5. $\int \frac{2x^2 + x - 8}{(x-3)(x^2 + 4)} dx$

6. $\int \frac{2x^3 - 8x^2 - 11x + 12}{(x-3)^2(x^2 + 4)} dx$

7. $\int \frac{4x^2 + 12x + 23}{(x+2)(x^2 + 2x + 5)} dx$

8. $\int \frac{4x^3 + 14x^2 + 7x - 10}{x^2(x^2 + 4x + 5)} dx$