

1. Calcular las siguientes integrales indefinidas

$$\text{a) } \int \frac{(2x+3) \, dx}{(x-2)(x+5)} \quad \text{b) } \int \frac{x \, dx}{(x+1)(x+2)(x+3)} \quad \text{c) } \int \frac{x \, dx}{x^3 - 3x + 2}$$

$$\text{d) } \int \frac{x^2 \, dx}{x^4 + 1} \quad \text{e) } \int \frac{dx}{(x+1)(x^2+1)^2(x+2)^2} \quad \text{f) } \int \frac{x^4 \, dx}{(x^2+3)^2}$$

$$\text{g) } \int \frac{(x+1) \, dx}{(x^2-1)^2} \quad \text{h) } \int \frac{dx}{x^4 - 2x^3} \quad \text{i) } \int \frac{x^2 \, dx}{(x^2 + 2x + 2)^2}$$

2. Calcular las siguientes integrales indefinidas

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

$$\int \frac{x-4}{x^2 - 5x + 6} \, dx$$

$$\int \frac{ax}{x^2 - bx} \, dx$$

$$\int \frac{1}{(x+a)(x+b)} \, dx$$

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

$$\int \frac{x^3 - 4x - 10}{x^2 - x - 6} \, dx$$

$$\int \frac{4y^2 - 7y - 12}{y(y+2)(y-3)} \, dy$$

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

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

$$\int \frac{x^2 - 5x + 16}{(2x+1)(x-2)^2} \, dx$$

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

$$\int \frac{ds}{s^2(s-1)^2}$$

$$\int \frac{10}{(x-1)(x^2+9)} \, dx$$

$$\int \frac{x^2 - x + 6}{x^3 + 3x} \, dx$$

$$\int \frac{4x}{x^3 + x^2 + x + 1} \, dx$$

$$\int \frac{x^2 + x + 1}{(x^2 + 1)^2} \, dx$$

$$\int \frac{x^3 + x^2 + 2x + 1}{(x^2 + 1)(x^2 + 2)} \, dx$$

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

$$\int \frac{x+4}{x^2 + 2x + 5} \, dx$$

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