

1 Resolver las siguientes integrales:

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

$$2 \int (x+2)^3 dx$$

$$3 \int (2x+1)(x^2+x+1) dx$$

$$4 \int \frac{x+1}{\sqrt[3]{x^2+2x+7}} dx$$

$$5 \int \operatorname{sen} 2x \cos 2x dx$$

$$6 \int \operatorname{sen}^4 x \cos x dx =$$

$$7 \int \operatorname{tg}^2 x \sec^2 x dx$$

$$8 \int \frac{\operatorname{arc} \operatorname{tg} x}{1+x^2} dx$$

2 Calcular las integrales:

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

$$2 \int \operatorname{tg} x dx$$

$$3 \int \frac{5^{3x}}{5^{3x}+7} dx$$

$$4 \int \frac{1}{x \ln x} dx$$

$$5 \int \frac{1}{\cos^2 x \operatorname{tg} x} dx$$

$$6 \int \frac{x+1}{x} dx$$

$$7 \int \frac{x+1}{x-5} dx$$

$$8 \int \frac{3x^3 + 5x}{x^2 + 1} dx$$

3 Resolver las siguientes integrales exponenciales:

$$1 \int e^{2x+2} dx$$

$$2 \int 5^x dx$$

$$3 \int 2^x 5^x dx$$

$$4 \int 8^{3x+1} dx$$

$$5 \int \frac{e^{\ln x}}{x} dx$$

$$6 \int e^{\operatorname{sen} x} \cos x dx$$

$$7 \int \frac{e^{\operatorname{arc} \operatorname{sen} x}}{\sqrt{1-x^2}} dx$$

4 Calcular las integrales:

$$1 \int (3 - \operatorname{sen} x) dx$$

$$2 \int \text{sen}(3x + 5) dx$$

$$3 \int (x + 1) \text{sen}(x^2 + 2x + 3) dx$$

$$4 \int e^x \text{sen} e^x dx$$

$$5 \int \text{sen} 2x dx$$

$$6 \int \text{sen}^2 2x dx$$

$$7 \int \text{sen}^3 x dx$$

5 Resolver las integrales:

$$1 \int (2x + \cos x) dx$$

$$2 \int \cos(2x + 5) dx$$

$$3 \int (x + 1) \cos(x^2 + 2x + 1) dx$$

$$4 \int \frac{\cos(\ln x)}{x} dx$$

$$5 \int \cos^2 x dx$$

$$6 \int \cos^3 3x dx$$

6 Calcular las integrales:

$$1 \int \frac{5}{\cos^2 x} dx$$

$$2 \int (3 + 3 \operatorname{tg}^2 x) dx$$

$$3 \int \sec^2(5x + 3) dx$$

$$4 \int \sec^4 x dx$$

$$5 \int (3 + 3 \cot^2 x) dx$$

$$6 \int \operatorname{tg}^2 x dx$$

$$7 \int \operatorname{cosec}^2(3x + 1) dx$$

$$8 \int \operatorname{cosec}^4 x dx$$

$$9 \int \cot^2 x dx$$

7 Resolver las integrales:

$$1 \int \operatorname{sen} 3x \cos 2x dx$$

$$2 \int \frac{dx}{\operatorname{sen}^2 x \cos^2 x}$$

$$3 \int \sqrt{\frac{1+x}{1-x}} dx$$

$$4 \int \frac{1 - \cos x}{1 + \cos x} dx$$

$$5 \int \frac{1 + \operatorname{sen} x}{1 - \operatorname{sen} x} dx$$

8 Calcular las integrales:

$$1 \int \frac{5}{x^2 - 4x + 8} dx$$

$$2 \int \frac{2x + 5}{\sqrt{9 - x^2}} dx$$

$$3 \int \frac{2^x}{\sqrt{1 - 4^x}} dx$$

$$4 \int \frac{x}{\sqrt{9 - 2x^3}} dx$$