

Alumno/a: _____ DNI: _____

Relación n° 1
Licenciatura de Geológicas
18/10/06

Calcular las siguientes integrales indefinidas:

$$1. \int \operatorname{ctg} (5x - 7) dx$$

$$2. \int \frac{\ln x}{x} dx$$

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

$$4. \int \frac{\operatorname{sen} 2x}{\sqrt{1+\operatorname{sen}^2 x}} dx$$

$$5. \int \frac{\operatorname{arc sen} x}{\sqrt{1-x^2}} dx$$

$$6. \int \frac{\operatorname{sen} 3x}{\sqrt[3]{\cos^4 3x}} dx$$

$$7. \int \frac{dx}{x \ln x}$$

$$8. \int \frac{(a^x - b^x)^2}{a^x b^x} dx$$

$$9. \int \frac{dx}{\sqrt{x} \sqrt{1+\sqrt{x}}}$$

$$10. \int \frac{\cos^3 x}{\operatorname{sen}^4 x} dx$$

Calcular las siguientes integrales indefinidas:

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

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

$$3. \int \frac{7x+1}{6x^2+x-1} dx$$

$$4. \int \frac{6x^4-5x^3+4x^2}{2x^2-x+1} dx$$

$$5. \int \frac{dx}{2 \cos^2 x + \operatorname{sen} x \cos x + \operatorname{sen}^2 x}$$

Calcular las siguientes integrales indefinidas:

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

$$2. \int \frac{dS}{\sqrt{2aS+S^2}}$$

$$3. \int \frac{dx}{\sqrt{5-7x-3x^2}}$$

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

$$5. \int \frac{3x+5}{\sqrt{x(2x-1)}} dx$$

Calcular las siguientes integrales indefinidas:

1. $\int x \ln x \, dx$
2. $\int \ln x \, dx$
3. $\int \ln(1 - x) \, dx$
4. $\int \arcsen x \, dx$
5. $\int x \arctg x \, dx$
6. $\int x \arcsen x \, dx$
7. $\int \frac{\arcsen \sqrt{x}}{\sqrt{x}} \, dx$
8. $\int \frac{x \arcsen x}{\sqrt{1-x^2}} \, dx$
9. $\int \frac{\arcsen x}{x^2} \, dx$
10. $\int \ln(x + \sqrt{1+x^2}) \, dx$
11. $\int \arcsen x \frac{x}{\sqrt{(1-x^2)^3}} \, dx$