

Examen de Matemáticas 2ºBachillerato(CN)

Marzo 2006

Problema 1 Calcular las siguientes integrales:

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

$$2. \int \frac{\sqrt[3]{x} - x}{\sqrt{x}} dx$$

$$3. \int 5x \cos(x^2 + 1) dx$$

$$4. \int 5x e^{x^2+1} dx$$

$$5. \int \frac{-4x}{\sqrt{1 - (x^2 + 1)^2}} dx$$

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

$$7. \int (x + 3)e^{x+1} dx$$

$$8. \int (2x + 1) \cos x dx$$

$$9. \int \frac{3x^2 - 1}{x^3 - x + 1} dx$$

$$10. \int (x + 2) \ln x dx$$