

TIA 1. Tarea: Taller Antiderivas

Instrucciones Debe resolver los ejercicios paso a paso de la tarea-taller Antiderivadas que corresponde al número de su grupo.

Grupo 1

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

2. $\int t^3 e^t \, dt$

3. $\int \sin^4 2\theta \, d\theta$

4. $\int \frac{1}{u^2 \sqrt{u^2 - 8}} \, du$

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

Grupo 2

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

2. $\int x^3 \sin x \, dx$

3. $\int \sin^6 \theta \, d\theta$

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

5. $\int \frac{1}{16x^4 - 1} \, dx$

Grupo 3

1. $\int \frac{t}{\sqrt{t+3}} dt$

2. $\int x^3 \cos x \, dx$

3. $\int \cos^6 \theta \, d\theta$

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

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

Grupo 4

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

2. $\int (t-1)^3 e^{t-1} dt$

3. $\int \sin^6 \frac{x}{2} \, dx$

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

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

Grupo 5

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

2. $\int x^3 e^{-x/3} dx$

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

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

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

Grupo 6

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

$$2. \int \ln|x + 3| dx$$

$$3. \int \tan^4 x dx$$

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

$$5. \int \frac{10}{(x-1)(x^2+9)} dx$$

Grupo 7

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

$$2. \int \ln|2x + 1| dx$$

$$3. \int \csc^6 x dx$$

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

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

Grupo 8

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

2. $\int (x^2 - 2x + 3x) \ln|x| \, dx$

3. $\int \sec^5 x \, dx$

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

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

Grupo 9

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

2. $\int t^3 e^t dt$

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

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

5. $\int \frac{1}{16x^4-1} dx$