



UDS

Universidad Del Sureste

6<sup>to</sup> Cuatrimestre Bachillero  
Administración De Recursos Humanos  
**MATEMATICA APLICADA**

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Borrallas

Examen

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

$$\frac{8x^2}{7} - \frac{305x^1}{7} + 27x - 10x + \frac{186x}{5} + 93 //$$

$$\frac{-135x^2}{2} + C //$$

$$2. - \int (x^3 + 5x^2 - 4) dx / x^2$$

$$3 + 5x^2 - 42 dx //$$

$$5 + 5x^2 - 42 dx //$$

$$\frac{3 + 5x^2 - 42 dx}{x^2} //$$

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

$$\int x^2 dx$$

$$\frac{x^3}{3}$$

$$\frac{x^3}{3} + C //$$

Duyani Norleth Mo Bernalles

$$4. -3\sqrt{1-x^2} \cdot x \, dx$$

$$\int 3\sqrt{1-x^2} \cdot x \, dx \quad 3 \int \sqrt{1-x^2} \cdot x \, dx \quad 3 \int \sqrt{1-x^2} \cdot x \, dx$$

$$3 \int \frac{1}{2} \cdot x \sqrt{x} \, dx \quad 3 \left(-\frac{1}{2}\right) \sqrt{1-x^2} \cdot d(1-x^2) \quad \frac{3}{2} \int + \frac{1}{2} \, dx$$

$$\frac{3}{2} \cdot x \cdot 2(1-x^2) \sqrt{1-x^2} \quad (1+x^2) \sqrt{1-x^2}$$

$$\underline{\underline{(-1+x^2)^3 \sqrt{1-x^2} + C}}$$

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

$$(1+x) \cdot x \, dx + \sqrt{x}$$

$$(1+x) \cdot x \, dx \sqrt{x}$$

$$\underline{\underline{2 \, dx \sqrt{x} + 2 \, dx \cdot \sqrt{x}}}$$

$$6. - \int \sqrt{x} \cdot x^2 \, dx$$

$$\int \frac{\sqrt{x}}{x^2} \, dx$$

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

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

$$-\frac{2}{\sqrt{x}} + C$$

$$\frac{2}{\sqrt{x}}$$

$$7_0 - \int 2x^3 / 3\sqrt{x^2} dx$$

$$2x \frac{3x^3}{x^2} \times d \quad \frac{33}{2x \cdot 10} \times d \quad \frac{2 \times 33}{10x} \times d$$

$$\frac{33}{5x} \times d \quad \frac{33}{5x} d$$

$$8_0 - \int dx / 4x^2 + 9$$

$$dx \frac{x}{4} \times x^2 + 9$$

$$\frac{dx}{4} \frac{x^2}{x^2 + 9} \quad \frac{dx' x^2}{4} + 9 \quad \frac{dx' + 2}{4} + 9$$

$$\frac{dx^3}{4} + 9$$

$$9_0 - \int dx / x^2 10x + 30$$

$$\frac{dx}{x^{210}} + 30 \quad d \frac{1}{x^{209}} + 30$$

$$d \frac{1}{x^{208}} + 30 \quad \frac{d}{x^{208}} + 30$$

Norleth

$$d \frac{30x^{208}}{x^{208}}$$