



**Mapa conceptual**

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**Nombre del trabajo: Derivadas**

**PASIÓN POR EDUCAR**

**Materia: Calculo 1**

**Grado: Bachillerato**

**Grupo: BEN01SDM0120-A**

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17/03/2022

$$f(x) = 5$$

$$f'(x) = 0$$

$$f(x) = -2x$$

$$f'(x) = -2$$

$$f(x) = -2x + 2$$

$$f'(x) = -2$$

$$f(x) = -2x^2 - 5$$

$$f'(x) = -2x^{2-1}$$

$$f'(x) = -4x$$

$$f'(x) = 2x^4 + x^3 - x^2 + 4$$

$$f'(x) = 8x^3 + 3x^2 - 2x$$

$$f(x) = \frac{x^3 + 2}{3}$$

$$\frac{1}{3} \left( \frac{d}{dx} (x^3) \right) + \left( \frac{d}{dx} (2) \right)$$

$$\frac{1}{3} (3x^2) = x^2$$

$$f(x) = \frac{1}{3x^2}$$

$$f(x) = \frac{1x^{-2}}{3}$$

$$f'(x) = -2x^{-3}$$

$$f'(x) = \frac{-2}{3x^3}$$

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$$f(x) = \frac{x+1}{x-1}$$

$$f'(x) = \frac{(x-1) \frac{d(x+1)}{dx} - (x+1) \frac{d(x-1)}{dx}}{(x-1)^2}$$

$$\frac{(x-1)(1) - (x+1)(1)}{(x-1)^2}$$

$$1x-1 - x-1$$

$$\frac{-2}{(x-1)^2}$$

$$f(x) = (5x^2 - 3)(x^2 + x + 4)$$

$$f(x) = 5x^4 + 5x^3 + 20x^2 - 3x^2 - 3x - 12$$

$$f'(x) = 20x^3 + 15x^2 + 40x - 6x - 3$$

$$f'(x) = 20x^3 + 15x^2 + 34x - 3$$

$$f(x) = \frac{5}{x^5}$$

$$f'(x) = 5 \cdot x^{-5}$$

$$f'(x) = -25x^{-6}$$

$$f'(x) = \frac{-25}{x^6}$$

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$$f(x) = \frac{5}{x^5} + \frac{3}{x^2}$$

$$f'(x) = 5x^{-5} + 3x^{-2}$$

$$f'(x) = -25x^{-6} - 6x^{-3}$$

$$f'(x) = -\frac{25}{x^6} - \frac{6}{x^3}$$

$$f(x) = \sqrt{x}$$

$$f'(x) = x^{\frac{1}{2}-1}$$

$$f'(x) = \frac{1}{2}x^{-\frac{1}{2}}$$

$$f'(x) = \frac{1}{2\sqrt{x}}$$

$$f(x) = \frac{1}{\sqrt{x}}$$

$$f(x) = \frac{1}{x^{\frac{1}{2}}}$$

$$f'(x) = 1 \cdot x^{-\frac{1}{2}-1}$$

$$f'(x) = -\frac{1}{2}x^{-\frac{3}{2}}$$

$$f'(x) = \frac{-1}{2\sqrt{x^3}}$$

$$f(x) = \sqrt{x^2 - 2x + 3}$$

$$f(x) = (x^2 - 2x + 3)^{\frac{1}{2}-1}$$

$$f'(x) = \frac{1}{2} (x^2 - 2x + 3)^{-\frac{1}{2}} (2x - 2)$$

$$f'(x) = \frac{1(1x-1)}{2(x^2-2x+3)^{\frac{1}{2}}}$$

$$d = \frac{(x^2 - 2x + 3)}{dx}$$

$$(2x - 2)$$

$$f(x) = \frac{1}{x\sqrt{x}}$$

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$$f(x) = \frac{1}{x \cdot x^{\frac{1}{2}}} = \frac{1}{x^{\frac{3}{2}}} = 1 \cdot x^{-\frac{3}{2}}$$

$$f'(x) = -\frac{3}{2} x^{-\frac{3}{2}-1}$$

$$f'(x) = -\frac{3}{2} x^{-\frac{5}{2}}$$

$$f'(x) = -\frac{3}{2x^{\frac{5}{2}}}$$

$$f'(x) = -\frac{3}{2\sqrt{x^5}}$$

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$$f(x) = \sqrt[3]{x^2} + \sqrt{x}$$

$$f(x) = x^{\frac{2}{3}} + x^{\frac{1}{2}}$$

$$f'(x) = \frac{2}{3} x^{\frac{2}{3}-1} + \frac{1}{2} x^{\frac{1}{2}-1}$$

$$f'(x) = \frac{2}{3} x^{-\frac{1}{3}} + \frac{1}{2} x^{-\frac{1}{2}}$$

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

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$$f(x) = (x^2 + 3x - 2)^4$$

$$f'(x) = 4(x^2 + 3x - 2)^3 \cdot (x' + 3)$$

$$f'(x) = (x^2 + 3x - 2)^3 (4x + 12)$$

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$$f(x) = \sqrt[4]{x^5 - x^3 - 2}$$

$$f(x) (x^5 - x^3 - 2)^{\frac{1}{4} - 1}$$

$$\frac{d(x^5 - x^3 - 2)}{dx}$$

$$f(x) = \frac{1}{4} (x^5 - x^3 - 2)^{-\frac{3}{4}}$$

$$(5x^4 - 3x^2 - 2)$$

$$\frac{5x^4 - 3x^2}{4}$$

$$(x^5 - x^3 - 2)^{\frac{3}{4}}$$