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**Nombre del trabajo:
TRIGONOMETRICAS**

Materia: calculo

Grado: 4to cuatrimestre

Grupo: A

Exerc. do Francisco Pascoal

$$1 f(x) = \text{Sen } \frac{1}{2}x \quad \text{Cos } \frac{1}{2}x \quad \text{Cos } \frac{1}{2}x \quad \frac{d(\frac{1}{2}x)}{dx} \quad \text{Cos } \frac{1}{2}x \times \frac{1}{2}$$

$$\frac{d(\frac{1}{2}x)}{dx} \quad \frac{1}{2}x \times \frac{1}{2}x *$$

$$2 f(x) = \text{Cos}(7-2x)$$

$$-\text{Sen}(7-2x) \times (7-2x) \quad \frac{d(7)}{dx} - \frac{d(2)}{dx} \quad 0 - 2$$

$$2 \text{Sen}(7-2x) *$$

$$3 f(x) = 3 + 92x$$

$$3 \text{Sec}(2) \quad d(3 \tan 2x) \quad 3 \text{Sec } 2x(2) \quad d(2x)$$

$$6 \text{Sec}^2 2x *$$

$$4 f(x) = \text{Sec}(5x+2)$$

$$\text{Sec}(5x+2) \tan(5x+2) (5x+2) \quad \frac{d(5x)}{dx} + \frac{d(2)}{dx} \quad 5 + 0$$

$$5 \text{Sec } 5x+2 \tan(5x+2) (5x+2) *$$

$$5 f(x) = \sqrt[3]{\text{Sen } x}$$

$$(\text{Sen } x)^{1/3} \quad \frac{1}{3} (\text{Cos } x)^{1/3-1} (\text{Cos } x)$$

$$\frac{1}{3} (\text{Sen } x)^{2/3} (-\text{Cos } x) \frac{dx}{dx} \quad \frac{dx}{dx}$$

$$\frac{1}{3} (\text{Sen } x)^{2/3} (-\text{Cos } x) x$$

$$\frac{-\text{Sen } 2x}{\sqrt[3]{\text{Cos } x^3}} *$$

Ezequiel Francisco Pascoal

$$6 f(x) = \text{Sen}^3 3x (\text{Sen } 3x)^3$$

$$3(\text{Sen } 3x)^2 \cdot d(\text{Sen } 3x)$$

$$3(\text{Sen } 3x)^3 \cos 3x \cdot 3x$$

$$3(\text{Sen } 3x)^3 \cos 3x (3)$$

$$3(\text{Sen } 3x)^3 (\cos 3x)$$

$$7 f(x) = \text{Cotg}(3-2x)$$

$$- \text{Csc}^2(3-2x) (3-2x) \quad \frac{d(3)}{dx} \quad \frac{d(2x)}{dx} \quad 0-2$$

$$2 \text{Csc}^2(3-2x) *$$

$$8 f(x) = \cos \frac{x+1}{x-1}$$

$$\frac{d(\cos \frac{x+1}{x-1})}{dx} = \text{Sen} \frac{x+1}{x-1} \cdot d\left(\frac{x+1}{x-1}\right)$$

$$- \text{Sen} \frac{x+1}{x-1} \left[\frac{(x-1)d(x+1) - (x+1)d(x-1)}{(x-1)^2} \right]$$

$$- \text{Sen} \frac{x+1}{x-1} \left[\frac{(x+1) - (x+1)(1)}{(x-1)^2} \right]$$

$$- \text{Sen} \frac{x+1}{x-1} \left[\frac{x-1-x}{(x-1)^2} \right]$$

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