

HOJA DE FÓRMULAS E IGUALDADES

$$x^a \cdot x^b = x^{a+b}$$

$$\frac{x^a}{x^b} = x^{a-b}$$

$$(x^a)^b = x^{a \cdot b}$$

$$\sqrt[a]{x} = x^{1/a}$$

$$\sqrt[a]{x^b} = x^{b/a}$$

$$\frac{1}{x^n} = x^{-n}$$

$$1 \frac{1}{\sqrt[a]{x^n}} = x^{-n/a}$$

$$\frac{\frac{a}{b}}{\frac{c}{d}} = \frac{a}{b} \cdot \frac{d}{c}$$

$$\frac{\frac{a}{b}}{c} = a \cdot \frac{c}{b}$$

$$\frac{\frac{a}{b}}{\frac{c}{d}} = \frac{a}{b} \cdot \frac{d}{c}$$

RELACIONES

TRIGONOMETRICAS:

$$\text{sen}^2(x) + \text{cos}^2(x) = 1$$

$$\text{tg}^2(x) + 1 = \text{sec}^2(x)$$

$$\text{tg}(x) = \frac{\text{sen}(x)}{\text{cos}(x)}$$

$$\text{sec}(x) = \frac{1}{\text{cos}(x)}$$

$$\text{cosec}(x) = \frac{1}{\text{sen}(x)}$$

$$\text{cot g}(x) = \frac{1}{\text{tg}(x)}$$

PROPIEDADES DE LOGARITMOS

$$\ln(x^n) = n \cdot \ln(x)$$

$$\ln(x \cdot y) = \ln(x) + \ln(y)$$

$$\ln\left(\frac{x}{y}\right) = \ln(x) - \ln(y)$$

$$\ln(e^x) = e^{(\ln x)} = x$$

$$\log_a(x) = \frac{\log_b(x)}{\log_b(a)}$$

DETERMINACIONES

$$\frac{\text{Nro.}}{0} = \infty \quad \frac{\text{Nro.}}{\infty} = 0$$

$$\frac{0}{\text{Nro.}} = 0 \quad \frac{\infty}{\text{Nro.}} = \infty$$

$$(a \pm b)^2 = a^2 \pm 2 \cdot a \cdot b + b^2$$

$$(a^2 - b^2) = (a + b) \cdot (a - b)$$

$$(a^3 - b^3) = (a - b) \cdot (a^2 + a \cdot b + b^2)$$

$$a \cdot x^2 + b \cdot x + c = a \cdot (x - x_1) \cdot (x - x_2)$$

$$a \cdot x^2 + b \cdot x + c = 0 \Rightarrow \frac{-b \pm \sqrt{b^2 - 4 \cdot a \cdot c}}{2 \cdot a} \Rightarrow x_1, x_2$$

" INDETERMINACIONES "

$$\frac{\infty}{\infty} \quad \frac{0}{0} \quad \infty \cdot 0 \quad \infty - \infty$$

$$1^\infty \quad 0^0 \quad \infty^0$$