

# FORMULARIO DE DERIVADAS

NOMBRE: \_\_\_\_\_

$$1.- \frac{d(K)}{dx} = 0$$

$$2.- \frac{d(x)}{dx} = 1$$

$$3.- \frac{d(KU)}{dx} = K \frac{dU}{dx}$$

$$4.- \frac{d(U+V)}{dx} = \frac{dU}{dx} + \frac{dV}{dx}$$

$$5.- \frac{d(U-V)}{dx} = \frac{dU}{dx} - \frac{dV}{dx}$$

$$6.- \frac{d(U^n)}{dx} = nU^{n-1} \frac{dU}{dx}$$

$$7.- \frac{d(U \cdot V)}{dx} = U \cdot \frac{dV}{dx} + V \cdot \frac{dU}{dx}$$

$$8.- \frac{d\left(\frac{U}{V}\right)}{dx} = \frac{V \cdot \frac{dU}{dx} - U \cdot \frac{dV}{dx}}{V^2}$$

$$9.- \frac{d(\text{sen } U)}{dx} = \cos U \cdot \frac{dU}{dx}$$

$$10.- \frac{d(\cos U)}{dx} = -\text{sen } U \cdot \frac{dU}{dx}$$

$$11.- \frac{d(\tan U)}{dx} = \sec^2 U \cdot \frac{dU}{dx}$$

$$12.- \frac{d(\cot U)}{dx} = -\csc^2 U \cdot \frac{dU}{dx}$$

$$13.- \frac{d(\sec U)}{dx} = \sec U \cdot \tan U \cdot \frac{dU}{dx}$$

$$14.- \frac{d(\csc U)}{dx} = -\csc U \cdot \cot U \cdot \frac{dU}{dx}$$

$$15.- \frac{d(\arcsen U)}{dx} = \frac{1}{\sqrt{1-U^2}} \cdot \frac{dU}{dx}$$

$$16.- \frac{d(\arccos U)}{dx} = -\frac{1}{\sqrt{1-U^2}} \cdot \frac{dU}{dx}$$

$$17.- \frac{d(\arctan U)}{dx} = \frac{1}{1+U^2} \cdot \frac{dU}{dx}$$

$$18.- \frac{d(\text{arccot } U)}{dx} = -\frac{1}{1+U^2} \cdot \frac{dU}{dx}$$

$$19.- \frac{d(\text{arcsec } U)}{dx} = \frac{1}{U\sqrt{U^2-1}} \cdot \frac{dU}{dx}$$

$$20.- \frac{d(\text{arccsc } U)}{dx} = -\frac{1}{U\sqrt{U^2-1}} \cdot \frac{dU}{dx}$$

$$21.- \frac{d(\ln U)}{dx} = \frac{1}{U} \cdot \frac{dU}{dx}$$

$$22.- \frac{d(\log_a U)}{dx} = \frac{1}{U} \cdot \log_a e \cdot \frac{dU}{dx}$$

$$23.- \frac{d(e^U)}{dx} = e^U \cdot \frac{dU}{dx}$$

$$24.- \frac{d(a^U)}{dx} = a^U \cdot \ln a \cdot \frac{dU}{dx}$$