Formulas Elementales de Derivación. Montoya

Montoya.-

$$f(x) = x^n$$

$$f'(x) = n\,x^{n-1}$$

$$(f + g)'(a) = f'(a) + g'(a)$$

$$(f \cdot g)'(a) = f(a) \cdot g'(a) + f'(a) \cdot g(a)$$

$$(f / g)'(a) = \frac{f'(a) \cdot g(a) - f(a) \cdot g'(a)}{g^2(a)}$$

$d(k)=0$ $\qquad$ $d(x)=1$

$d(u+v-w)=du+dv-dw$ $\qquad$ $d(Ku)=Kdu$

$d(uv)=udv+vdu$ $\qquad$ $d(u^n) = nu^{n-1}du$

$d(\frac{u}{v}) = \frac{vdu - udv}{v^2}$ $\qquad$ $d(\text{senu}) = \text{cosu} \cdot du$

$d(\text{cosu}) = -\text{senu} \cdot du$ $\qquad$ $d(\text{tgu}) = \sec^2 u \cdot du$

$d(\text{ctgu}) = -\csc^2 u \cdot du$ $\qquad$ $d(\text{secu}) = \text{secu} \cdot \text{tgu} \cdot du$

$d(\text{cscu}) = -\text{cscu} \cdot \text{ctgu} \cdot du$ $\qquad$ $d(\text{Ln u}) = \frac{1}{u}du$

$d(\log u) = \frac{1}{uLnu}du$ $\qquad$ $d(a^u) = (a^u Lna)du.$

$d(e^u) = e^u du$

$d(\text{arcsenu}) = \frac{du}{\sqrt{1-u^2}}$ $\qquad$ $d(\text{arccosx}) = -\frac{dx}{\sqrt{1-x^2}}$

$d(\text{arctagx}) = \frac{dx}{1+x^2}$ $\qquad$ $d(\text{arccotg}) =$

$d(\text{arcsecx}) = \frac{dx}{x\sqrt{x^2-1}}$ $\qquad$ $d(\text{arccscx}) = -\frac{dx}{x\sqrt{x^2-1}}$