

Derivadas de funciones algebraicas

$$\frac{d}{dx}c = 0, "c" \text{ es una constante}$$

$$\frac{d}{dx}x = 1$$

$$\frac{d(u + v - w)}{dx} = \frac{du}{dx} + \frac{dv}{dx} - \frac{dw}{dx}$$

$$\frac{d}{dx}cv = c \frac{dv}{dx}$$

$$\frac{d(x^n)}{dx} = nx^{n-1}$$

$$\frac{d}{dx}v^n = nv^{n-1} \frac{dv}{dx}$$

$$\frac{d}{dx}\sqrt[n]{v} = \frac{1}{n\sqrt[n]{v^{n-1}}} \frac{dv}{dx}$$

$$\frac{d}{dx}\sqrt{v} = \frac{1}{2\sqrt{v}} \frac{dv}{dx}$$

$$\frac{d}{dx}\left(\frac{c}{v}\right) = -\frac{c}{v^2} \frac{dv}{dx}$$

$$\frac{d}{dx}\left(\frac{v}{c}\right) = \frac{1}{c} \frac{dv}{dx}$$

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$$\frac{d}{dx}(uv) = u \frac{dv}{dx} + v \frac{du}{dx} \quad \frac{d}{dx}\left(\frac{u}{v}\right) = \frac{v \frac{du}{dx} - u \frac{dv}{dx}}{v^2}$$

Derivadas trigonométricas

$$\frac{d}{dx} \operatorname{sen} v = \cos v \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{csc} v = -\operatorname{csc} v \cot v \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{cos} v = -\operatorname{sen} v \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{sec} v = \operatorname{sec} v \tan v \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{tan} v = \operatorname{sec}^2 v \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{cot} v = -\operatorname{csc}^2 v \frac{dv}{dx}$$

Derivadas de inversas trigonométricas

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$$\frac{d}{dx} \operatorname{arc} \operatorname{sen} v = \frac{1}{\sqrt{1-v^2}} \cdot \frac{dv}{dx}$$

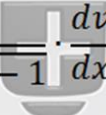
$$\frac{d}{dx} \operatorname{arc} \operatorname{cos} v = -\frac{1}{\sqrt{1-v^2}} \cdot \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{arc} \operatorname{tan} v = \frac{1}{1+v^2} \cdot \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{arc} \operatorname{cot} v = -\frac{1}{1+v^2} \cdot \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{arc} \operatorname{sec} v = \frac{1}{v\sqrt{v^2-1}} \cdot \frac{dv}{dx}$$

$$\frac{d}{dx} \operatorname{arc} \operatorname{csc} v = -\frac{1}{v\sqrt{v^2-1}} \cdot \frac{dv}{dx}$$

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Derivadas logarítmicas

$$\frac{d}{dx} \ln v = \frac{1}{v} \cdot \frac{dv}{dx}$$

$$\frac{d}{dx} \log_b v = \frac{\log_b e}{v} \cdot \frac{dv}{dx}$$

Derivadas exponenciales

$$\frac{d}{dx} e^v = e^v \cdot \frac{dv}{dx}$$

$$\frac{d}{dx} a^v = a^v \ln a \cdot \frac{dv}{dx}$$

$$\frac{d}{dx} u^v = v \cdot u^{v-1} \cdot \frac{du}{dx} + \ln u \cdot u^v \frac{dv}{dx}$$

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