

Differentiator

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Annotation

This is auto-generated by Differentiator document. Don't try to change TeX file. Change TeX introduction function instead. In this article we will take derivative of functions, do Taylor's extension

Differentiating

Now let's take derivative of this expression:

$$\tanh x$$

Differentiating tanh: $(\tanh f(x))' = \frac{f'(x)}{\cosh^2 x}$

$$\tanh x$$

Result:

$$\frac{1}{(\cosh x)^2}$$

Taylor extension:

$$f(0.3) = 0 + 1(0.3 - 0) + \frac{-0}{2}(0.3 - 0)^2 + \frac{-2}{6}(0.3 - 0)^3 + \frac{0}{24}(0.3 - 0)^4 \approx 0.291$$