

Onder één noemer zetten

Extra voorbeeld voor bij les 4
de kettingregel

$$f(x) = x \cdot \sqrt{x^2 - 1}$$

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$$f'(x) = 1 \cdot \sqrt{x^2 - 1} + x \cdot \frac{1}{2\sqrt{x^2 - 1}} \cdot 2x$$

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$$f'(x) = \frac{x^2 - 1 + x^2}{\sqrt{x^2 - 1}} \quad \text{onder één noemer zetten}$$

$$f'(x) = \frac{2x^2 - 1}{\sqrt{x^2 - 1}} \quad \text{herleiden}$$

Voorbeeld

De afgeleide van $f(x) = x^2\sqrt{1-x^2}$ is

$$f'(x) = \frac{-3x^3 + 2x}{\sqrt{1-x^2}}$$

Zelf proberen!

$$f(x) = x^2 \sqrt{1 - x^2}$$

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Einde