

OVERZICHT FORMULES

Differentiëren

| naam van de regel | functie | afgeleide |
|-------------------|----------------------------|--|
| somregel | $s(x) = f(x) + g(x)$ | $s'(x) = f'(x) + g'(x)$ |
| verschilregel | $s(x) = f(x) - g(x)$ | $s'(x) = f'(x) - g'(x)$ |
| productregel | $p(x) = f(x) \cdot g(x)$ | $p'(x) = f'(x) \cdot g(x) + f(x) \cdot g'(x)$ |
| quotiëntregel | $q(x) = \frac{f(x)}{g(x)}$ | $q'(x) = \frac{f'(x) \cdot g(x) - f(x) \cdot g'(x)}{(g(x))^2}$ |
| kettingregel | $k(x) = f(g(x))$ | $k'(x) = f'(g(x)) \cdot g'(x)$ of $\frac{dk}{dx} = \frac{df}{dg} \cdot \frac{dg}{dx}$ |

Logaritmen

| regel | voorwaarde |
|---|---|
| ${}^s \log(a) + {}^s \log(b) = {}^s \log(ab)$ | $g > 0, g \neq 1, a > 0, b > 0$ |
| ${}^s \log(a) - {}^s \log(b) = {}^s \log\left(\frac{a}{b}\right)$ | $g > 0, g \neq 1, a > 0, b > 0$ |
| ${}^s \log(a^p) = p \cdot {}^s \log(a)$ | $g > 0, g \neq 1, a > 0$ |
| ${}^s \log(a) = \frac{{}^p \log(a)}{{}^p \log(g)}$ | $g > 0, g \neq 1, a > 0, p > 0, p \neq 1$ |