



## Stammfunktionen :

$$f(x) \implies F(x)$$

Konstante :

$$1 \implies x$$

$$c \implies c \cdot x$$

$$x \implies \frac{1}{2}x^2$$

$$x^2 \implies \frac{1}{3}x^3$$

$$x^3 \implies \frac{1}{4}x^4$$

Potenzregel für jedes  $n \neq -1$  :

$$x^n \implies \frac{1}{n+1}x^{n+1}$$

$$mx + b \implies \frac{1}{2}mx^2 + bx$$

$$ax^2 + bx + c \implies \frac{1}{3}ax^3 + \frac{1}{2}bx^2 + cx$$

Summenregel :  $f(x) + g(x) \implies F(x) + G(x)$

konstanter Faktor :

$$c \cdot f(x) \implies c \cdot F(x)$$

$$\sqrt{x} = x^{\frac{1}{2}} \implies \frac{1}{\frac{3}{2}}x^{\frac{3}{2}} = \frac{2}{3}x^{\frac{3}{2}}$$

$$e^x \implies e^x$$

$$e^{ax+b} \implies \frac{1}{a}e^{ax+b}$$

$$\sin x \implies -\cos x$$

$$\cos x \implies \sin x$$

$$\sin(ax + b) \implies -\frac{1}{a}\cos(ax + b)$$

$$\frac{1}{3}\cos(2x - \pi) \implies \frac{1}{6}\sin(2x - \pi)$$

$$\frac{1}{x} \implies \ln|x|$$