

Integrale nach Partialbruchzerlegung

$$\int \frac{1}{x-a} dx = \ln|x-a| + c$$

$$\int \frac{1}{(x-a)^m} dx = -\frac{1}{m-1} \cdot \frac{1}{(x-a)^{m-1}} + c, \text{ für } m \geq 2$$

$$\int \frac{1}{x^2+ax+b} dx = \frac{2}{\sqrt{4b-a^2}} \arctan \frac{2x+a}{\sqrt{4b-a^2}} + c$$

$$\int \frac{cx+d}{x^2+ax+b} dx = \frac{c}{2} \ln|x^2+ax+b| + \left(d - \frac{ca}{2}\right) \int \frac{1}{x^2+ax+b} dx + c$$