

deriválási, integrálási azonosságok

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| $(f(x)g(x))' = f'(x)g(x) + f(x)g'(x)$ |
| $\left(\frac{f(x)}{g(x)}\right)' = \frac{f'(x)g(x) - f(x)g'(x)}{g^2(x)}$ |
| $(f(g(x)))' = f'(g(x))g'(x)$ |
| $\int f(x) dx = F(x) + c$ |
| $\int f'(x)g(x) dx = f(x)g(x) - \int f(x)g'(x) dx$ |
| $\int f^n(x)f'(x) dx = \frac{f^{n+1}(x)}{n+1} + c$ |
| $\int \frac{f'(x)}{f(x)} dx = \ln f(x) + c$ |
| $\int f(ax+b) dx = \frac{F(ax+b)}{a} + c$ |
| $\int f(u(x))u'(x) dx = \int f(u) du = F(u(x)) + c$ |

| $f(x)$ | $F(x)$ |
|----------------------|--|
| 1 | x |
| x^n | $\frac{x^{n+1}}{n+1}$ |
| $\frac{1}{x}$ | $\ln x $ |
| e^x | e^x |
| $\sin x$ | $-\cos x$ |
| $\cos x$ | $\sin x$ |
| $\frac{1}{\cos^2 x}$ | $\operatorname{tg} x$ |
| $\frac{1}{1+x^2}$ | $\operatorname{arc} \operatorname{tg} x$ |