

Partielle Integration

(a) $\int_a^b x \sin(cx) dx$

(b) $\int_a^b \sin(x) \cos(x) dx$

(c) $\int_a^b x^2 e^{cx} dx$

(d) $\int_a^b 1 \cdot \ln(x) dx$

(e) $\int_a^b e^x \cos(x) dx$

(f) $\int_a^b \sin(x) \sin(2x) dx$

Integration mit Substitution

(a) $\int_a^b (x + c)^{14} dx$

(b) $\int_a^b \exp(-3x + 5) dx$

(c) $\int_a^b \frac{\sin(x^2)}{2x} dx$

(d) $\int_a^b x \exp x^2 dx$

(e) $\int_a^b \tan(x) dx$

(f) $\int_a^b \frac{f'(x)}{f(x)} dx$