

Berechne mit Hilfe der partiellen Integration:

$$\int x e^x dx =$$

$$\int x \sin(x) dx =$$

$$\int_0^1 3x e^x dx =$$

$$\int_{\pi}^{2\pi} 2x \cos(x) dx =$$

$$\int x^2 e^x dx =$$

$$\int_0^{\pi} ax^2 \sin(x) dx =$$