

積分練習問題

$$(1) \int_0^1 (x^6 + x^4) dx$$

$$(2) \int_0^{\frac{\pi}{6}} \sin\left(2x + \frac{\pi}{6}\right) dx$$

$$(3) \int_4^6 \frac{dx}{x^2 - 2x - 3}$$

$$(4) \int_e^{e^2} \log x dx$$

$$(5) \int_{\frac{\pi}{4}}^{\frac{\pi}{2}} \sin^2 \theta d\theta$$