部分積分による定積分

3I 31 橋本千聡

06-01

(1) $\int_0^a f(x)dx = \int_0^a f(a-x)dx$

=

(2) $\int_0^{\frac{\pi}{2}} \frac{\cos x}{\cos x + \sin x}dx$

=

06-02

(1) $\int_0^{\frac{\pi}{2}} x\cos 3xdx$

=

(2) $\int_1^2 xe^{\frac{x}{2}}dx$

=

(3) $\int_1^{e^2} \log xdx$

=

(4) $\int_0^{\frac{\pi}{2}} (x-1)\sin xdx$

=

(5) $\int_{-}^{} 4^3 \log(x+5)dx$

=

(6) $\int_1^e x^2 \log xdx$

=

06-03

(1) $\int_{-}^{} 1^1 xe^{-3x^2}dx$

=

(2) $\int_{-\pi}^{\pi} x^2 \sin xdx$

=

06-04

(1) $\int_1^e \frac{\log x}{x^2}dx$

=

(2) $\int_{-}^{} 1^1 x^2 e^{2x}dx$

=

(3) $\int_{-\frac{\pi}{2}}^{\frac{\pi}{2}} x^2 \cos xdx$

=

06-05

(1)$I = \int_0^{\frac{\pi}{2}} e^x \sin xdx$

=

(2)$J = \int_0^{\frac{\pi}{2}} e{-}x\cos xdx$

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