—数III積分—

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1.
$$\int dx$$

$$2. \quad \int x^n \ dx$$

3.
$$\int 2^x dx$$

4.
$$\int \log x \, dx$$

5.
$$\int x \log x \, dx$$

$$6. \quad \int \sin 2x \sin 9x \ dx$$

7.
$$\int \tan x \, dx$$

8.
$$\int \frac{dx}{\sin x + 1}$$

9.
$$\int \frac{dx}{\cos x}$$

$$10. \quad \int \frac{dx}{x^2 + 2x + 1}$$

$$11. \quad \int \frac{dx}{x^2 - 4x + 3}$$

12.
$$\int_{-2}^{\sqrt{5}-2} \frac{dx}{x^2 + 4x + 9}$$

13.
$$\int \frac{2x^2 + 12x + 7}{x^2 + 5x + 1} \, dx$$

$$14. \quad \int \frac{3x+1}{(x+2)^2} \, dx$$

15.
$$\int_{-\frac{1}{2}}^{\frac{1}{2}} \sqrt{\frac{1-x}{1+x}} \, dx$$

$$16. \quad \int x^x (1 + \log x) \ dx$$

$$17. \quad \int_0^{\frac{\pi}{2}} \frac{\sin x}{\sin x + \cos x} \, dx$$

$$18. \quad \int \frac{dx}{e^x + 1}$$

$$19. \quad \int \sqrt{e^x} + 1 \, dx$$

20.
$$\int \frac{dx}{\sqrt{x^2+1}}$$

$$21. \quad \int \sqrt{x^2 + 1} \, dx$$

$$22. \quad \int \frac{x}{\sqrt{x+1}+1} \, dx$$

23.
$$\int_{-1}^{1} \frac{x^2}{1 + e^x} \, dx$$

24.
$$\int e^x \sin x \, dx$$

$$25. \quad \int_{\alpha}^{\beta} (x - \alpha)^n (x - \beta) \, dx$$

$$26. \quad \int_0^\pi \frac{x \sin x}{3 + \sin^2 x} \, dx$$