

1 1次関数との合成型

$$(1) \int_0^{\frac{\pi}{2}} \sin 3x dx \quad (2) \int_0^1 e^{2x-1} dx \quad (3) \int_0^1 \sqrt{3-2x} dx \quad (4) \int_0^1 \log(3x+1) dx$$

2 f, g, g' 型

$$(1) \int_0^1 (2x+1)(x^2+x+1)^2 dx \quad (2) \int_0^1 x e^{-x^2} dx \quad (3) \int_0^2 x \sqrt{4-x^2} dx$$

3 $\frac{f'}{f}$ 型

$$(1) \int_0^1 \frac{2x+1}{x^2+x+1} dx \quad (2) \int_0^{\frac{\pi}{4}} \tan x dx \quad (3) \int_0^1 \frac{1}{e^x+1} dx$$

4 円の一部型

$$(1) \int_0^1 \sqrt{1-x^2} dx \quad (2) \int_0^1 \sqrt{2x-x^2} dx$$

5 置換積分法

$$(1) \int_0^1 \frac{1}{\sqrt{4-x^2}} dx \quad (2) \int_0^1 \frac{1}{3+x^2} dx \quad (3) \int_1^2 \frac{x^3}{(x+2)^2} dx$$