

凑微分常用类型：

$$\int x^{n-1} f(ax^n + b) dx = \int \frac{1}{na} f(ax^n + b) d(ax^n + b) (n > 1, a > 0)$$

$$\int \frac{1}{x} f(\ln x) dx = \int f(\ln x) d(\ln x)$$

$$\int e^x f(e^x) dx = \int f(e^x) de^x$$

$$\int \frac{1}{\sqrt{x}} f(\sqrt{x}) dx = 2 \int f(\sqrt{x}) d\sqrt{x}$$

$$\int \sin x f(\cos x) dx = - \int f(\cos x) d(\cos x)$$

$$\int \cos x f(\sin x) dx = \int f(\sin x) d(\sin x)$$

$$\int \frac{1}{\sqrt{1-x^2}} f(\arcsin x) dx = \int f(\arcsin x) d \arcsin x$$

$$\int \frac{1}{1+x^2} f(\arctan x) dx = \int f(\arctan x) d \arctan x$$