高数公式

不定积分公式

$$\int \tan x \, dx =$$

$$\int \cot x \, dx =$$

$$\int \frac{dx}{\cos x} =$$

$$\int \frac{dx}{\sin x} =$$

$$\int sec^2 x \, dx =$$

$$\int \csc^2 x \, dx =$$

$$\int \sec x \tan x \, dx =$$

$$\int \csc x \cot x \, dx =$$

$$\int \frac{1}{1+x^2} \, dx =$$

$$\int \frac{1}{a^2+x^2}\,dx =$$

$$\int \frac{1}{\sqrt{1-x^2}}\,dx =$$

$$\int \frac{1}{\sqrt{a^2-x^2}}\,dx =$$

$$\int \frac{1}{\sqrt{x^2+a^2}}\,dx =$$

$$\int \frac{1}{\sqrt{x^2-a^2}}\,dx =$$

$$\int \frac{1}{x^2-a^2}\,dx =$$

$$\int \sqrt{a^2-x^2}\,dx =$$

$$\int \sin^2 x\,dx =$$

$$\int \cos^2 x\,dx =$$

$$\int \tan^2 x\,dx =$$

$$\int \cot^2 x\,dx =$$

$$\int a^x\,dx =$$

三角函数微分

$d\tan x =$

$d\cot x =$

$d\sec x =$

$d\csc x =$

$\frac{1}{a}d\arctan\frac{x}{a} =$

$d\arcsin\frac{x}{a} =$

泰勒公式

1.泰勒级数

$f(x)=\sum_{n=0}^{\infty}\frac{f^{(n)}(x_0)}{n!}(x-x_0)^n$

2.麦克劳林级数

$f(x)=\sum_{n=0}^{\infty}\frac{f^{(n)}(0)}{n!}x^n$

3.重要展开式

$$e^x =$$

$$\frac{1}{1+x} =$$

$$\frac{1}{1-x} =$$

$$\ln(1+x) =$$

$$\sin x =$$

$$\arcsin x =$$

$$\cos x =$$

$$\tan x =$$

$$\arctan x =$$

$$(1+x)^a =$$