

Neurite' integrally

$$1) \int x^3 - \frac{2}{x} + \sqrt[3]{x^2} - \frac{3}{\sqrt{x}} dx$$

$$\left[\frac{x^4}{4} - 2 \ln x + \frac{3\sqrt[3]{x^5}}{2} - 6\sqrt{x} + c \right]$$

$$2) \int -2 \cos x + 2e^x + \frac{1}{x^2+1} dx$$

$$\left[-2 \sin x + 2e^x + \arctan x + c \right]$$

$$3) \int x \cdot \sqrt{x} - \frac{1+x}{x^2} dx$$

$$\left[\frac{2\sqrt{x^5}}{5} + \frac{1}{x} - \ln x + c \right]$$

$$4) \int \frac{x}{3} \cdot e^x dx$$

$$\left[\frac{1}{3} e^x (x-1) + c \right]$$

$$5) \int x^2 \cdot \ln x dx$$

$$\left[\frac{x^3}{3} \ln x - \frac{x^3}{9} + c \right]$$

$$6) \int x \cdot \cos x dx$$

$$\left[x \sin x + \cos x + c \right]$$

$$7) \int x^2 \cdot e^x dx$$

$$\left[e^x (x^2 - 2x + 2) + c \right]$$

$$8) \int \frac{(x-1)^2}{\sqrt{x}} dx$$

$$\left[\frac{2}{5} \sqrt{x^5} - \frac{4}{3} \sqrt{x^3} + 2\sqrt{x} + c \right]$$

$$9) \int \frac{\sin 2x}{\cos x} + \sin^2 x + \cos^2 x dx$$

$$\left[-2 \cos x + x + c \right]$$