

Integration by Parts

Tabular Integration

Ultra Violet minus Super Vudu

Integrate each of the following

1. $\frac{dy}{dx} = 2xe^{3x}$ $x = 0, y = 1$
2. $\int x \cos x \, dx$
3. $\int \arccos(x) \, dx$
4. $\frac{dy}{dx} = x \sec^2(\pi x)$ $x = 2, y = 0$
6. $\frac{dy}{dx} = x(x + 8)^8$ $x = 0, y = 1$
7. $\int (\ln x)^2 \, dx$
9. $\int x^3 e^{2x} \, dx$
11. $\int \sqrt{x} \ln x \, dx$

Integrate each of the following

$$10. \int e^{2x} \sin(3x) dx$$

$$13. \int e^x \cos(2x) dx$$

$$12. \int \frac{x^3}{\sqrt{1+x^2}} dx$$