

Integration by Substitution:

$$\int -16x^3(-4x^4 - 1)^{-5} dx$$

$$\int -\frac{8x^3}{(-2x^4 + 5)^5} dx$$

$$\int (3x^5 - 3)^{\frac{3}{5}} 15x^4 dx$$

$$\int (e^{4x} - 4)^{\frac{1}{5}} 8e^{4x} dx$$

$$\int 5x \sqrt{2x+3} \, dx$$

$$\int \frac{2}{x(-1 + \ln(4x))} dx$$

$$\int \frac{5e^{(-3+\ln(3x))}}{x} dx$$

$$\int 36x^2 e^{(4x^3+3)} dx$$

$$\int 10 \sin(-2x) e^{\cos(-2x)} dx$$

$$\int -\frac{5\cos(-4 + \ln(4x))}{x} dx$$

Integration by Parts

$$\int x e^{-x} dx$$

$$\int \sqrt{x} \ln(x) dx$$

$$\int x^2 e^{5x} dx$$

$$\int \cos(2x) e^{-x} dx$$

$$\int \frac{x^2}{e^{2x}} dx$$

$$\int x \ln(x) dx$$

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