Problem Set
Section 5.5

Problem 1

Find the integral

$$\int_{-\frac{\pi}{3}}^{\frac{\pi}{3}} \left(x \tan(x^4) + x^2 \right) dx$$

Problem 2

Find the integral

$$\int_0^{\frac{1}{2}} \frac{\cos\left(\sin^{-1} x\right)}{\sqrt{1-x^2}}\,dx$$

Find the integral

Problem 3

Find

$$\int \sqrt[3]{x^3 + 1}\ \ x^5 dx$$

Problem 4

Find the integral

$$\int_0^{\frac{\pi}{4}} (1 + \tan x)^3 \sec^2 x \, dx$$

Problem 5

Find the integral

$$\int_0^1 4e^x \sinh x \, dx$$