408L CLASS PROBLEMS

JANUARY 31, 2020

Problem 1. Find $\int \frac{dx}{x\sqrt{\log(x)}}$.

Problem 2. Find $\int_1^2 \frac{e^{\frac{1}{x}} dx}{x^2}$.

Problem 3. Find $\int_{-5}^{-1} \frac{dx}{x}$.

Problem 4. Find $\int \frac{x^2+x+1}{x^2+1} dx$.

Problem 5. Find $\int_0^{\frac{\pi}{4}} \frac{\sec^2 x}{1+\tan x} dx$.