

Quiz 1: 8.1, 8.3

Problem 1 Find the following indefinite integral.

$$\int x^2 e^{8x} dx$$

Problem 2 Compute the present value and accumulated money flow after a 10 year period at 4 percent interest, where the flow rate at 1000's of dollars per year is

$$f(t) = 20e^{-.01t}$$

Problem 3 Find the following integral

$$\int_0^{\pi/2} \cos(\theta) \sin(\theta) d\theta$$

Problem 4 Find the following integral

$$\int \cos(x)e^x dx$$