

Name:

Math 10a
November 6, 2014
Quiz #8

1. (1 point) Is $e^x + e^{-x}$ an even function, an odd function, or neither?

2. (a) (2 points) $\int_0^{\infty} e^{-4x} dx$.

(b) (2 point) Suppose a probability density function is given by

$$f(x) = \begin{cases} 0 & x < 0 \\ Ce^{-4x} & x \geq 0 \end{cases}$$

for some constant C . What must C be?

3. (2 points) $\int x \ln(x) dx$

4. (3 points) $\int_0^\pi x^2 \sin(x) dx.$