Homework 3

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Stat 610 Distribution Theory

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Problem 1. *Statistical Inference* by Casella and Berger, 2nd Edition, Chapter 1, Exercise 47 parts b and c.

47. Prove the following functions are cdfs.

    (b) $(1+e^{-x})^{-1}$, $x \in (-\infty, \infty)$

    (c) $e^{-e^{-x}}$, $x \in (-\infty, \infty)$

(b) For all $x_1 \leq x_2$, and $x_1, x_2 \in (-\infty, \infty)$, $e^{x_1} \leq e^{x_2}$ due to the property of

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