

# Homework 4 Answers

BSTA 550

## Questions

1. Not given

2. Not given

3. a.

$$F_X(x) = \begin{cases} 0 & x \leq 16 \\ \frac{1}{64}x^2 - \frac{1}{2}x + 4 & 16 < x \leq 24 \\ 1 & x > 24 \end{cases}$$

b.  $a = 20$

4. (a)  $k = 660$

(b)

$$F_X(x) = \begin{cases} 0 & x < 0 \\ 55x^{12} - 120x^{11} + 66x^{10} & 0 \leq x \leq 1 \\ 1 & x > 24 \end{cases}$$

## Extra Problems