

Homework 10 Answers

BSTA 550

Non-textbook problems

- #1:

Textbook problems

There are answers at the back of the book!! Selected answers (or hints) not provided at the end the book:

- Chapter 37
 - # 2: 0.8869
 - # 4: 0.0023
 - # 20: 0.3936
 - # 24: 0.4562
 - # 30: (b) 0.0022 (c) $478.696 \approx 479$
- Chapter 43
 - NTB 3: (a) $\text{Poisson}(\sum_{i=1}^n \lambda_i)$ (b) $\text{Poisson}(3\lambda)$ (c) $M_{3X}(t) = e\lambda(e^{3t} - 1)$ This is not an mgf of a common probability distribution. (d) In (b) we are adding independent r.v.'s X_i , while in (c) we are adding dependent r.v.'s ($3X = X + X + X$; X is dependent with itself).