

# Homework 2 Answers

BSTA 550

## Non-textbook problems

- #1: (a) 1 does not hold because  $0 \neq \frac{1}{216}$  (b) 2 does not hold because  $P(B \cap C) \neq P(B)P(C)$
- NTB # 2: 0.3916

## Textbook problems

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

- Chapter 22
  - # 30: (a) 2,835 (b) 405 (c) 10,780 (d) 7,980
  - # 40: 0.6666667
  - # 42: 0.002116402 (This is the answer when  $n = 5$ . Your answer needs to be in terms of  $n$ .)
  - # 44: 0.3
  - # 46: 0.3333333
  - # 48: 0.007936508 (This is the answer when  $n = 5$ . Your answer needs to be in terms of  $n$ .)
- Chapter 3
  - # 4: (a) 0.111328 (b) 0.004872 0.995128
  - # 10: (c) 0.384 If you have the right answer to (c), then you should be able to figure out the rest (see (e)).

- # 12: No.
  - NTB #1: (a) 0.0799      (b) 0.07553      (c) 0.0655
- Chapter 4
  - #4: 0.25
  - # 12: (a) 0.4285714      (b) 0.4285714      (c) 0.1428571
- Chapter 5
  -