## **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  $P(B \cap C) \neq P(B)P(C)$ 

## 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
  - $\ \# \ 4{:}\ (a)\ 0.111328 \quad \ (b)\ 0.004872 \quad \ 0.995128$
  - # 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

 $- \ \# \ 12{:}\ (a)\ 0.4285714 \qquad (b)\ 0.4285714 \qquad (c)\ 0.1428571$