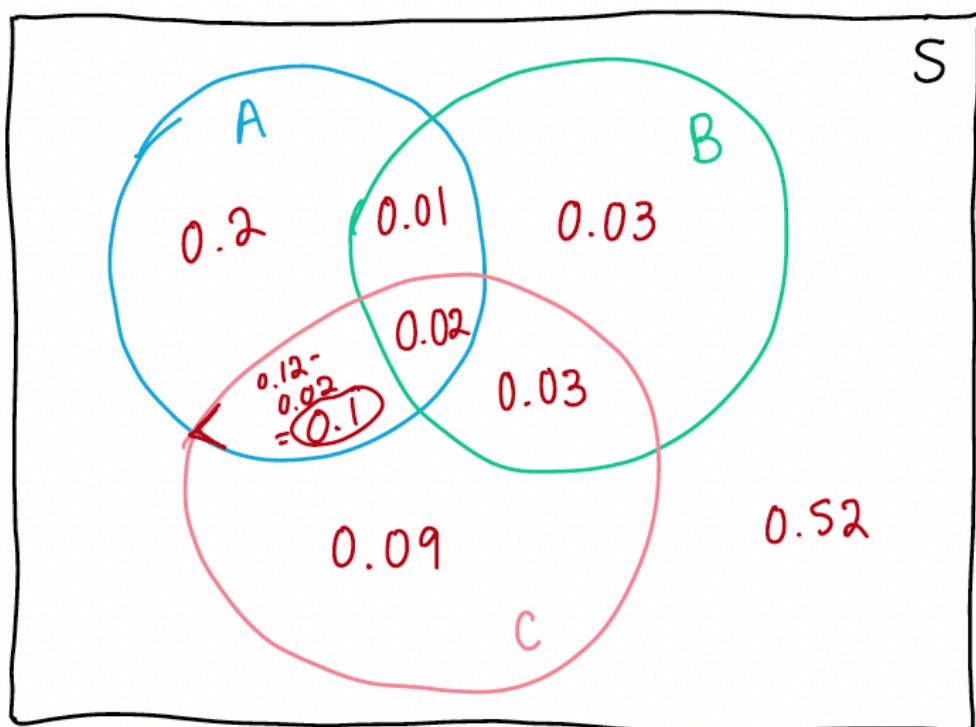


# Homework 2 Answers

## BSTA 550

Below are some select answers from the homework.

### Questions



1. (a)

Answers for part (ii) for each:

1. 0.48
2. 0.52
3. 0.2

(b)

4. 0.32
  5. 0.03
  6. 0.01
  7. 0.02
2. (c) 0.384 If you have the right answer to (c), then you should be able to figure out the rest (see (e)).
3. (a) 1 does not hold because  $0 \neq \frac{1}{216}$ . (b) 2 does not hold because  $P(B \cap C) \neq P(B)P(C)$
  4. a. 5/9; b. 2/5; c. 2/4
  5. a. 0.71; b. 0.29; c. 48/71; d. 1; e. 25/29; f. 25/39

**Extra problem**

1. (a) 16, (c) for one,  $P(X = 10) = \frac{5}{16}$ , (d) 0.375