Name:

THE UNIVERSITY OF TEXAS AT AUSTIN

Homework Assignment # 1

Prerequisite material.

Problem 4.20.

a. $\mathbb{P}[A^C] =$

b. $\mathbb{P}[\text{all are the same}] =$

c. $\mathbb{P}[\text{at least one H and at least one T}] =$

d. Answer:
Explanation:

e. Answer:
Explanation:

Problem 4.32.

a. $\mathbb{P}[\text{French}] =$

b. $\mathbb{P}[\text{not English}] =$

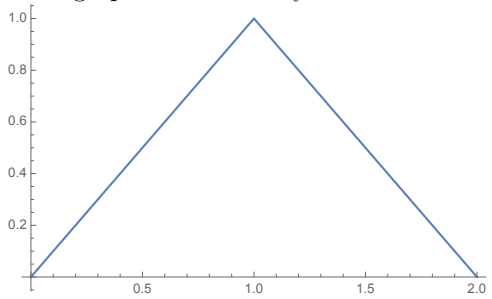
Problem 4.42.

a.

b.

Problem 4.64.

a. Use the graph of the density to substantiate your verification!



b. $\mathbb{P}[Y < 1] =$

c. $\mathbb{P}[Y > 0.6] =$

Problem 4.104.

a. $\mathbb{P}[A \cap B] =$

b. Draw your Venn diagram here:

c. $\mathbb{P}[B \setminus A] =$

Problem 4.110.

a.

b.

c.

Problem 4.110.

$$\mathbb{P}[A \cup B] =$$

Problem 4.126.

a. Write the probabilities in the following table:

	BSc	MSc	Professional	PhD
Female				
Male				

b. $\mathbb{P}[Female] =$

c. $\mathbb{P}[Female \,|\, Professional] =$

d. Answer:

Explanation:

Problem 4.138.

a. Mean:
Standard deviation:

b.

Value of X	2	3	4
Probability			