

ECS 315: In-Class Exercise # 4

Instructions

1. Separate into groups of no more than three persons. **The group cannot be the same as any of your former groups.**
2. **Write down all the steps** that you have done to obtain your answers. You may not get full credit even when your answer is correct without showing how you get your answer.
3. **Do not panic.**

Date: __ / __ / 2018			
Name			ID <small>(last 3 digits)</small>

In each of the parts below, find $P(A)$, $P(B)$, and $P(A \cap B)$.

(a) $P(A^c) = 0.5$, $P(B^c) = 0.7$, and $P(A \cup B) = 0.6$.

$$P(A) = \underline{\hspace{2cm}}, P(B) = \underline{\hspace{2cm}}, \text{ and } P(A \cap B) = \underline{\hspace{2cm}}.$$

(b) $P(A^c \cap B^c) = 0.1$, $P(A \cap B^c) = 0.2$, and $P(A^c \cap B) = 0.3$.

$$P(A) = \underline{\hspace{2cm}}, P(B) = \underline{\hspace{2cm}}, \text{ and } P(A \cap B) = \underline{\hspace{2cm}}.$$

(c) $P(A \cup B) = 0.43$, $P(A \cup B^c) = 0.62$, $P(A^c \cup B) = 0.97$.

$$P(A) = \underline{\hspace{2cm}}, P(B) = \underline{\hspace{2cm}}, \text{ and } P(A \cap B) = \underline{\hspace{2cm}}.$$

