

# Worksheet 1 Solution

March 8, 2020

## Question 1

a)  $A = \{ 2, 5 \}$

$$A^c = \{1, 3, 4, 6\}$$

b)  $A^c = U \setminus A$

c)  $A^c \cap B^c = \{ x \mid x \in U, x \leq 0 \text{ and } x \geq 4 \}$

$$A^c \cap B^c = \{ x \mid x \in U, x < 1 \text{ and } x > 2 \}$$

$$(A \cap B)^c = \{ x \mid x \in U, x < 1 \text{ and } x > 2 \}$$

$$(A \cup B)^c = \{ x \mid x \in U, x \leq 0 \text{ and } x \geq 4 \}$$