LOGIKA MATEMATIKA (MA2713)	NIM :
WAKTU :	
DOSEN : ANDRIAN RAKHMATSYAH	**SOAL LATIHAN #1**
SIFAT : Closed Books, No Cheating	
NAMA :	

Kerjakanlah dengan baik, mulai dengan berdoa !

1. Determine the elements of the set $A = \{x \mid x^2 = 11x - 30 \text{ or } 4 - x > 0\}$ when the universal set U is :
   a. the set of positive integers
   b. the set of odd integers
   c. the set of even integers
   d. the set of integers greater than 10

2. For each of the following, determine the relative complement A - B :
   a. A = {a,), 17} B = {)}
   b. A = {1, 5, 6, a} B = {}
   c. A = {2, 4} B = {1, 2, 4, 7}
   d. A = ∅ B = {a,), 17}

3. In each of the following, determine which of the two sets A and B is a subset of the other :
   a. A = {1, 4, 7} B = {4, 10, 1, 7}
   b. A = {2, 5, a, 6} B = {a}
   c. A = {1, 2, a, b} B = {a, 1, b, 2}
   d. A = ∅ B = {a, b, c}
   e. A = ∅ B = {}
   f. A = {1, a, 7} B = {a, b, 7}

4. Verify each of the following relationship
   a. $A \cap (B \cap C) = (A \cap B) \cap C$
   b. $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$
   c. $A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$
   d. $A \cap (B \Delta C) = (A \cap B) \Delta (A \cap C)$