

Answer on Question #77152 – Math – Discrete Mathematics

Question

Let $U = \{-8, -7, \dots, 1, 0, 1, \dots, 12\}$

$$A = \{x : -2 < x < 3\}$$

$$B = \{x : -8 < x < 5\}$$

$$C = \{x : 0 < x < 12\}$$

Find:

1. $A \cup B$
2. $A \cap B$
3. A
4. $B \setminus A$

Solution

Let N be the difference of sets, then

$$1) A \cup B = \{-7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4\}$$

$$2) A \cap B = \emptyset$$

$$3) A = \{-1, 0, 1, 2\}$$

$$4) B \setminus A = \{-7, -6, -5, -4, -3, -2, 3, 4\}$$