ES. 06/03/2019

$A = \{2, 5\}$

$B = \{1, 4\}$

$C = \{3, 7, 6, 8, 10, 2\}$

$D = \{7, 6, 9, 10\}$

$(A \cup B)^c = 3, 6, 7, 8, 9, 10$ } 3, 8

$D^c = 1, 2, 3, 4, 5, 8$

$C^c = 1, 3, 4, 5$ } 3 $1 \to$ FALSE

$(A \cap B)^c = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10$ $2 \to$ TRUE

$(B \cap C)^c = \Omega$ $\Omega = \Omega$ $3 \to$ TRUE

$A^c =$

$(A \cap B)^c = \Omega$

4) $C^c = 1, 3, 4, 5$

$D^c = 1, 2, 3, 4, 5, 8$

$C^c \triangle D^c = 2, 8$ $4 \to$ FALSE

$(C^c \triangle D^c) \cap B = \emptyset$

$\to ((C^c \triangle D^c) \cap B)^c = \Omega$

5) $(A \triangle C \triangle D) \cap B = \emptyset$ $A = \{2, 5\}$
                                                        $C = \{2, 6, 7, 8, 9, 10\}$
                                                        $D = \{6, 7, 9, 10\}$

$A \triangle C \triangle D = \{2, 5, 6, 7, 8, 9, 10\}$

$B = \{1, 4\}$ $(A \triangle C \triangle D) \cap B = \emptyset$ TRUE