Quiz on 6.1: Sets

If $A = \{1, 2, 3, 4, 5\}$ and $B = \{2, 4, 6\}$ then what are the elements of:

 $A\cup B$

 $A\cap B$

A - B

B - A

2. Explain why or give an example to show why not:

Does $X \cup Y$ always equal $Y \cup X$?

Does $X \cap Y$ always equal $Y \cap X$?

Does X - Y always equal Y - X?

Does X - Y ever equal Y - X?

Does X - Y always equal $X \cap Y$?

Does X - Y ever equal $X \cap Y$?