Exercise 41

Sets Find the indicated set if

$$A = \{1, 2, 3, 4, 5, 6, 7\} \qquad B = \{2, 4, 6, 8\} \qquad C = \{7, 8, 9, 10\}$$

(a) $A \cup B$ **(b)** $A \cap B$

Solution

The union of A and B ($A \cup B$) is the combination of elements in both, whereas the intersection of A and B ($A \cap B$) is only the elements they have in common.

$$A \cup B = \{1, 2, 3, 4, 5, 6, 7, 8\}$$

$$A \cap B = \{2, 4, 6\}$$