Exercise 42

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) $B \cup C$ **(b)** $B \cap C$

Solution

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

$$B \cup C = \{2, 4, 6, 7, 8, 9, 10\}$$

$$B \cap C = \{8\}$$