

Exercise 46

Sets Find the indicated set if

$$A = \{x \mid x \geq -2\} \quad B = \{x \mid x < 4\}$$

$$C = \{x \mid -1 < x \leq 5\}$$

(a) $A \cap C$

(b) $A \cap B$

Solution

The intersection of A and C ($A \cap C$) contains the elements they have in common. The same is true for the intersection of A and B .

$$A \cap C = \{x \mid -2 \leq x \leq 5\}$$

$$A \cap B = \{x \mid -2 \leq x < 4\}$$