

Lista II

$$1) a) A = \{x \in \mathbb{Z} / x > 5 \text{ e } x \leq 1\}$$

$$A = \{-4, -3, -2, -1, 0, 1\}$$

$$b) B = \{x \in \mathbb{Z} / x > -6\}$$

$$B = \{-5, -4, -3, -2, -1, 0, 1, 2, \dots\}$$

$$2) a) A - B$$

$$A - B = \{3, 5\}$$

$$b) (A \cup B) - C$$

$$A \cup B = \{1, 2, 3, 4, 5, 8\} - C$$

$$(A \cup B) - C = \{4, 8\}$$

③ a) $\{x / x \in \mathbb{N}, 2x + 7 = 3\}$ ~~\emptyset~~

$$2x + 7 = 3$$

$$2x = 3 - 7$$

$$2x = -4$$

$$x = -\frac{4}{2}$$

$$x = -2 \notin \mathbb{N}$$

b) $\{x / x \in \mathbb{Z}, 3x + 5 = 9\}$ ~~\emptyset~~

$$3x + 5 = 9$$

$$3x = 9 - 5$$

$$3x = 4$$

$$x = \frac{4}{3} \notin \mathbb{Z}$$

c) $\{x / x \in \mathbb{Q}, x^2 + 4 = 6\}$ ~~\emptyset~~

$$x^2 + 4 = 6$$

$$x^2 = 6 - 4$$

$$x^2 = 2$$

$$x = \sqrt{2} \notin \mathbb{Q}$$

④ a) $x + 1 = 2$

$$x = 2 - 1$$

$$x = 1$$

b) $x - 1 = 2$

$$x = 2 + 1$$

$$x = 3$$

c) $2x = x$

$$x = 0$$