

Practice Exercise 2.1

1. Classify the following sentence as a statement, not statement or an open statement.

- a. Chiangmai Province is in the central region. _____
- b. In the year 2017, there was a big flood in Bangkok. _____
- c. The water rises, hurry up and scoop. _____
- d. $\sqrt{3} = 1.732$ _____
- e. $2x + 3 = 8$ _____
- f. Please, don't bring food inside the classroom. _____
- g. x is larger than 4 _____
- h. π is a real number _____
- i. Substitute 4 for x _____
- j. Come and join the party! _____

2. Determine whether the following open statements become true or false after replacing the given values of x from a) and b).

Open Statement	Values of x	
1. $x^2 - 5x + 6 = 0$	a.) $x = 2$	b.) $x = -2$
2. $x^2 - x - 6 = 0$	a.) $x = 2$	b.) $x = -2$
3. $x^2 \leq 4$	a.) $x = -2$	b.) $x = 0$
4. $\sqrt{x^2} = x$	a.) $x = 3$	b.) $x = -3$
5. $\frac{x}{x} = 1$	a.) $x = -4$	b.) $x = 0$