

**Example 1.** *Then  $1 + 1 = 2$ .*

**Example 2.** *Let  $x \in \mathbb{R}$ . Then  $x^2 \geq 0$ .*

**Example 3.** *Let  $a \in \mathbb{R}$ . Let  $b \in \mathbb{R}$ . Then  $a + b = b + a$ .*

**Example 4.** *Let  $x \in \mathbb{R}$ . Then  $x^2 \geq 0$ .*

**Example 5.** *Let  $x \in \mathbb{R}$ . Then  $x + \frac{1}{x} - 2 = \frac{x^2+1-2x}{x}$ . Then  $\frac{x^2+1-2x}{x} = \frac{(x-1)^2}{x}$ .  
Then  $x + \frac{1}{x} - 2 = \frac{(x-1)^2}{x}$ . Then  $\frac{(x-1)^2}{x} \geq 0$ . Then  $x + \frac{1}{x} - 2 \geq 0$ . Then  $x + \frac{1}{x} \geq 2$ .*