Exercise 3.143. [1X3] *Let $A, B \subseteq \mathbb{R}$ and let $f : A \to B$ be defined by the formula $f(x) = x^2$; tell if, for the following choices of A, B, the function f is injective and/or surjective.*

1. $A = \mathbb{R}, B = \mathbb{R}$
2. $A = \mathbb{R}, B = [0, \infty)$
3. $A = [0, \infty), B = \mathbb{R}$
4. $A = [0, \infty), B = [0, \infty)$

If the function is bijective, what is its inverse commonly called?
(This exercise is to make you ponder about the difference between "formula" and "function."