Understanding inverse relations

Student Activity Sheet 4; Exploring "The quadratic function and its inverse"

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16. **REINFORCE** Restrict the domain of f(x) to the largest possible set of values such that the inverse of f is a function. Find an algebraic rule for $f^{-1}(x)$, the inverse of f.

a.
$$f(x) = 4x^2$$

b.
$$f(x) = x^2 + 4$$

c.
$$f(x) = x^2 - 2$$

17. **REINFORCE** Is the inverse of $y = x^4$ a function? Justify your answer.