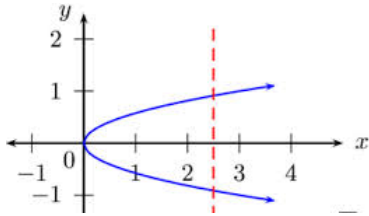
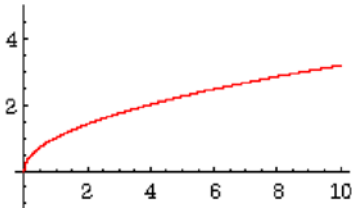


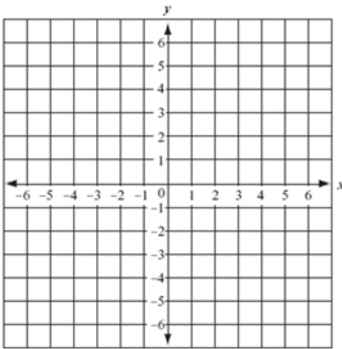
1. Why is the following relation not a function?



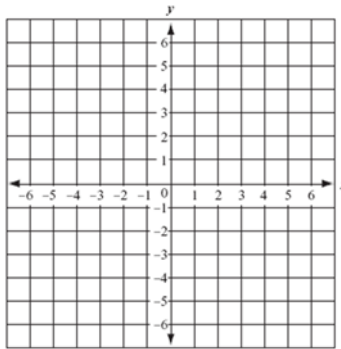
2. Is the following relation a function? Justify your answer.



3. Graph the absolute value parent function $y = |x|$. The graph its inverse.



$y = |x|$



Inverse

Is the inverse a function?
 Justify your answer.

4. What does it mean when a function is “one-to-one”?

5. 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. $f(x) = 9x^2$

b. $f(x) = x^2 + 9$

c. $f(x) = x^2 - 10$

d. $f(x) = x^3$