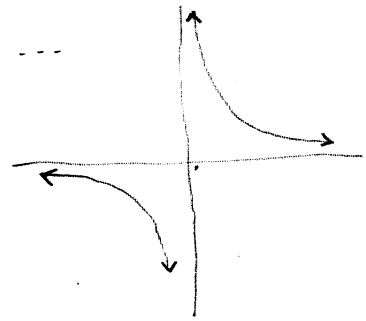
① ②

- Is $f(x) = 1/x$ one-to-one? What about $g(x) = 1/x^2$?

① $f(x) = \frac{1}{x}$ ITS GRAPH IS ONE OF OUR BASIC GRAPHS.

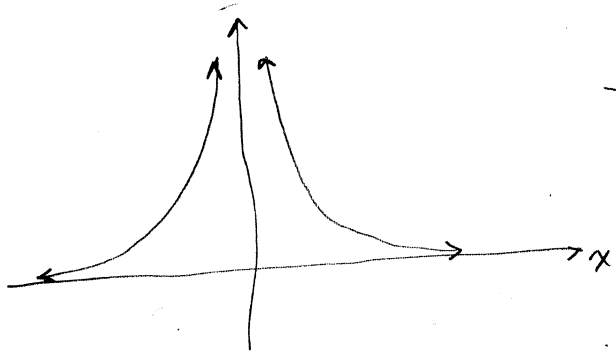
THE GRAPH LOOKS LIKE ...



THE GRAPH PASSES THE HORIZONTAL LINE TEST.

$\boxed{f \text{ IS ONE-TO-ONE.}}$

② $g(x) = \frac{1}{x^2}$ ITS GRAPH IS ALSO A BASIC GRAPH.



THE GRAPH IS SYMMETRIC ABOUT THE y-AXIS.

IT CANNOT PASS THE HORIZONTAL LINE TEST.

$\boxed{g \text{ IS NOT ONE-TO-ONE.}}$