

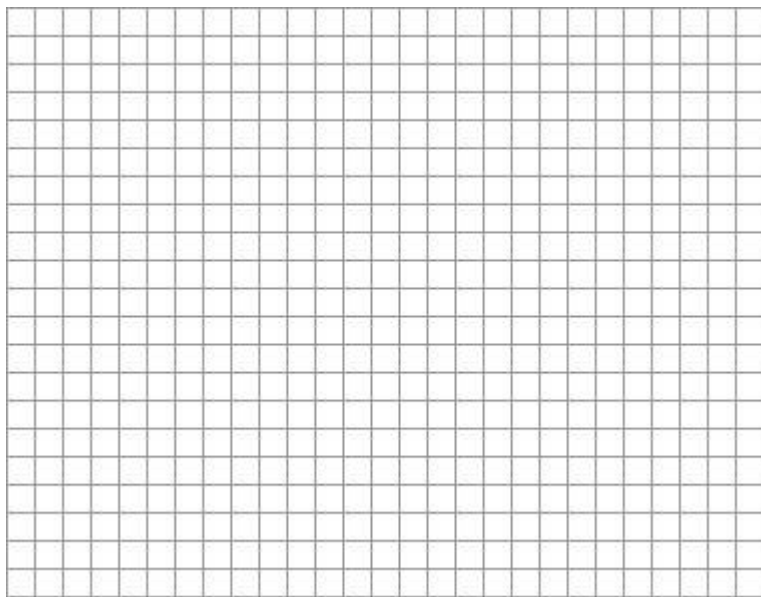
Inverse functions - Worksheet

NAME:

DATE:

1. Use a calculator and the *Horizontal Line Test* to determine whether $f(x) = -0.1x^3 + 0.05x - 1$ is 1-1.
2. State a way of restricting the domain of the given function so that the restricted function has an inverse. $f(x) = \sqrt{9 - x^2}$
3. $f(x) = \sqrt{4x - 7}$.
 - (a) Use algebra to find the the expression of the inverse of f .
 - (b) Find the domain and range f and f^{-1} .

(c) Sketch the graph of f and f^{-1} .



4. Find the expression of $f \circ f^{-1}$ and $f^{-1} \circ f$.