Equations of Inverses

A graph and its inverse are reflections (symmetric) across _____.

The inverse of f(x) is often written as $f^{-1}(x)$ if _____.

- Use your calculator to test if the inverse is a function.
  - If the inverse is a function:
    - Write down the original function.
    - Change f(x) to y.
    - Switch x and y.
    - Solve for y.
    - Change y to $f^{-1}(x)$.
  - If the inverse is not a function:
    - Write a sentence explaining that the inverse is not a function.
    - You are done!

$f(x) = \frac{x-7}{3}$

$f(x) = x^2 - 5$

$f(x) = \log(x)$

$f(x) = \log_3 x$

$f(x) = \frac{1}{2}x + 4$

$f(x) = (x-3)^2$

$f(x) = x + 1$

$f(x) = \frac{x-5}{6}$