Precalculus

1-09 Inverse Functions

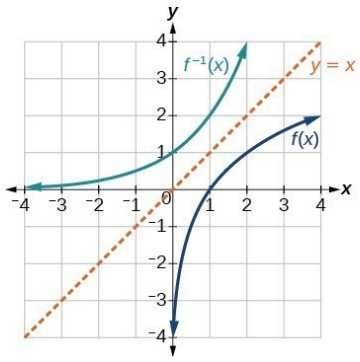
Inverse functions

- Switch _____
- Switch _____and _____
- Verify inverses by showing _____and _____

Verify that $f(x) = 7x - 4$ and $g(x) = \frac{x+4}{7}$ are inverses

Graphs of inverses

- Reflected over line _____



One-to-one

- A function is one-to-one if each y corresponds to _____one x.
- Passes the _____line test
- Inverse of a 1-to-1 is a _____

Finding inverses

1. _____$f(x)$ with y
2. _____x and y
3. _____for y
4. If you did step 1, _____y with $f^{-1}(x)$

Find the inverse of $f(x) = \sqrt[3]{10 + x}$

Find the inverse of $f(x) = x^2 - 2,\ x < 0$