Inverse Operations

$+ \longleftrightarrow$

$x \longleftrightarrow$

$x^2 \longleftrightarrow$

$x^3 \longleftrightarrow$

$x^n \longleftrightarrow$
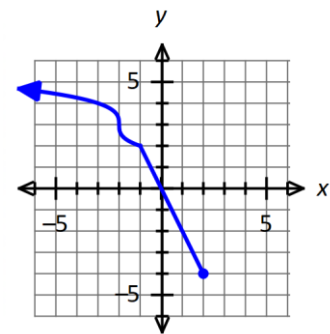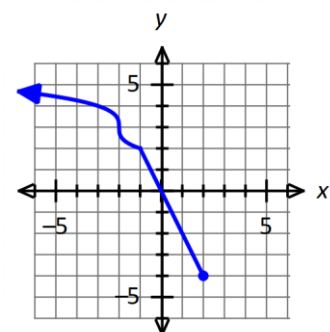
$x^{\frac{m}{n}} \longleftrightarrow$

$\log_a m = n \longleftrightarrow$

How to find the inverse of a table

x	f(x)
-10	¼
.5	-1
½	5
6	2.3

x	$f^{-1}(x)$

How to find the inverse of a graph

Steps on how to find the inverse function

1. flip-flop x and y

2. Solve for y

EX. $f(x) = -6\sqrt[3]{4x-1} + 8$

How to prove 2 functions are inverses

1. Find $f(g(x))$

2. Find $g(f(x))$

3. If they both equal x,
   then they are inverses

EX. $f(x) = 4(x-3)^2 + 1$

$g(x) = \sqrt{\dfrac{x-1}{4}} + 3$