

Inverse Functions Worksheet

1. Given function f , is the inverse also a function? Why or why not?
 $f(x) = \{(6,8), (2,-4), (10,-2), (4,4)\}$
2. If $f(x) = 7x - 2$, find $f^{-1}(x)$.
3. a) If $g(x) = x^2 + 2$, $x \geq 0$, find $g^{-1}(x)$.
b) If $h(x) = x^2 + 2$, $x \leq 0$, find $h^{-1}(x)$.
4. Find the inverse for the function $y = (x + 2)^3$.
5. Find the inverse for the function $y = \frac{1}{x}$.
6. Find the inverse for the function $y = \frac{x + 3}{x}$.
7. Using composition of functions, show that $f(x) = 2x - 3$ and $g(x) = \frac{x + 3}{2}$ are inverses of each other.
8. On the same set of axes, sketch the graph of $f(x) = 3x - 4$ and its inverse.

