

Inverse Functions Homework

Using the function $f(x) = 4x - 3$

1. List the operations on x :

a)

b)

2. Backwards/opposite those operations:

a)

b)

3. What is the inverse function of $f(x)$? $f^{-1}(x) =$

Use any method to find the inverse of the following functions. Then use it to find

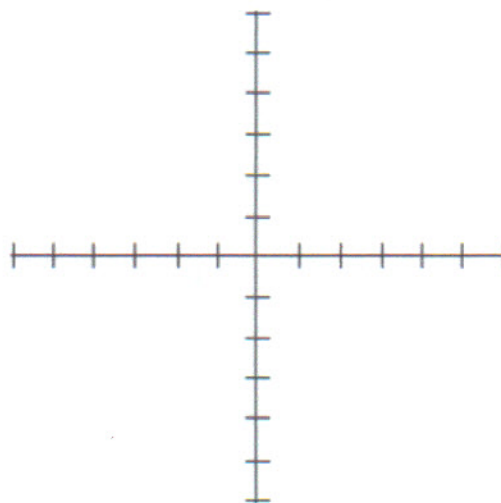
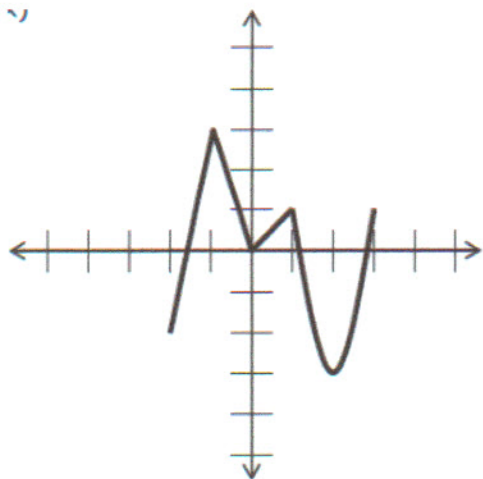
$f^{-1}(2)$, $f^{-1}(0)$, and $f^{-1}(3)$.

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

5. $f(t) = 4(t - 3)$

Graph the inverse of the function $f(x)$ graphed below.

6. ~



7. Is the inverse a function? Why or why not?

Now, evaluate each of the following:

8. $f(3)$

9. $f^{-1}(-3)$

10. $f^{-1}(0)$

11. $f(2) - f^{-1}(1)$

For each of the following functions – a) find the inverse, b) find the domain and range of the inverse, c) determine whether the inverse is a function, and d) then evaluate (if possible) the table for $f^{-1}(-4)$, $f(4)$, and $f^{-1}(2)$.

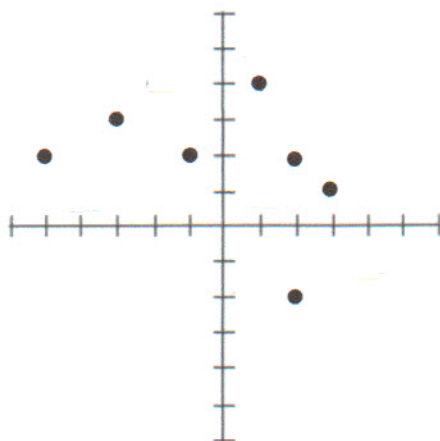
12.

x	$f(x)$
1	2
2	1
3	0
4	1
5	2

13.

p	$f(p)$
-1	-7
0	-4
2	2
3	5
4	8

14.



15.

