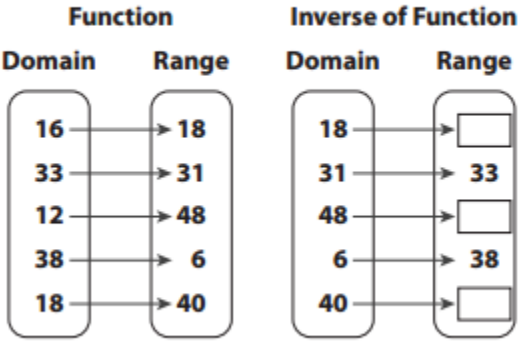
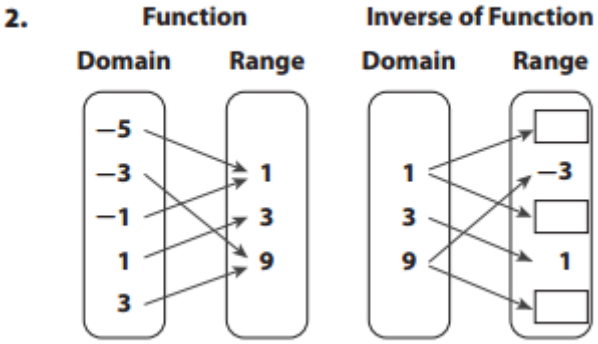
MATH 2 –M1:L1.3 Inverse Functions **Name:_____ Per:____**
Assignment #12

The mapping diagrams show a function and its inverse. Complete the diagram for the inverse of the function. Then tell whether the inverse is a function, and explain your reasoning.

1.

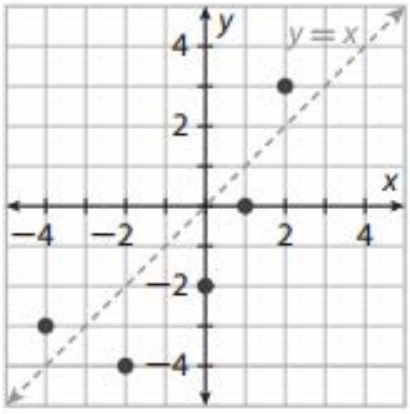


2.

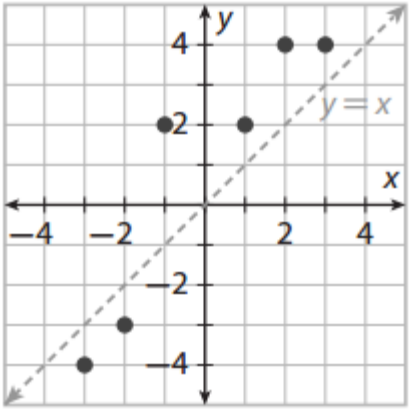


Write the inverse of the given function as a set of ordered pairs and then graph the inverse on the coordinate plane.

3. Function: {(-4, -3), (-2, -4), (0, -2), (1, 0), (2, 3)}



4. Function: {(-3, -4), (-2, -3), (-1, 2), (1, 2), (2, 4), (3, 4)}



Find the inverse function $f^{-1}(x)$ for the given function $f(x)$.

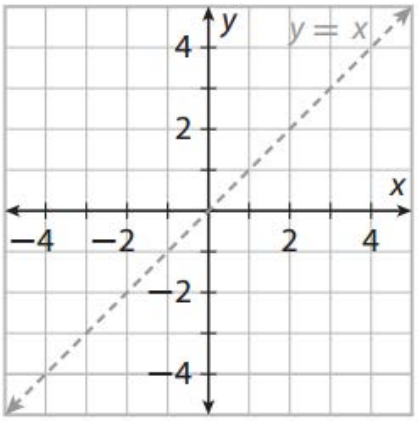
5. $f(x) = 4x - 8$

6. $f(x) = \frac{x}{3}$

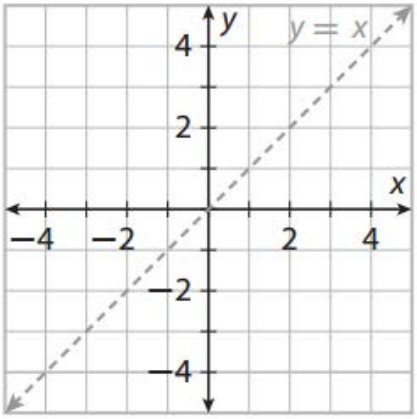
7. $f(x) = \frac{x+1}{6}$

8. $f(x) = -.75x$ (Hint: -.75 is the same as what fraction)

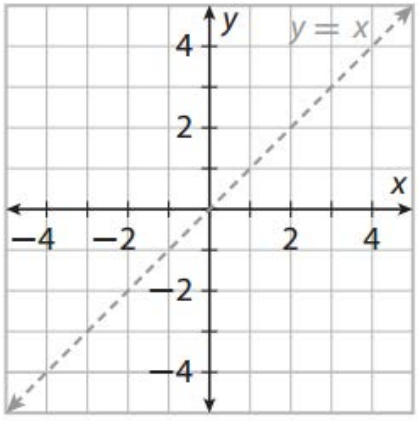
9. $f(x) = -3x + 3$



10. $f(x) = \frac{2}{5}x - 2$



11. $f(x) = 2x + 1$



12. $f(x) = \frac{1}{4}x + 3$