

Name _____

Date _____

Inverses of Discrete Functions - Matching Worksheet

Write the letter of the answer that matches the problem.

1. If $f(x) = 7x + 3$, Find $f^{-1}(x)$

a. $f^{-1} = \{(1, 2), (5, -4), (-10, 14)\}$

2. If $f(x) = \{(2, 1), (-4, 5), (14, -10)\}$. Find $f^{-1}(x)$

b. $\{(6, 5), (7, -6), (-2, 10)\}$

3. If $f(x) = \sqrt{x+3}$. Find $f^{-1}(x)$

c. $f^{-1}(x) = x^2 - 9$

4. If $f(x) = 7x + 9$, Find $f^{-1}(x)$

d. $f^{-1}(x) = \frac{x-5}{8}$

5. If $f(x) = \{(5, 6), (-6, 7), (10, -2)\}$ Find $f^{-1}(x)$

e. $f^{-1}(x) = x^2 - 2$

6. If $f(x) = \sqrt{x+9}$, Find $f^{-1}(x)$

f. $f^{-1}(x) = \frac{x-8}{22}$

7. If $f(x) = 8x + 5$, Find $f^{-1}(x)$

g. $\{(7, 2), (-17, 3), (-6, 11)\}$

8. If $f(x) = \{(2, 7), (3, -17), (11, -6)\}$ Find $f^{-1}(x)$

h. $f^{-1}(x) = x^2 - 3$

9. If $f(x) = \sqrt{x+2}$ Find $f^{-1}(x)$

i. $f^{-1}(x) = \frac{x-3}{7}$

10. If $f(x) = 22x + 8$, Find $f^{-1}(x)$

j. $f^{-1}(x) = \frac{x-9}{7}$

