Math 3 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1-1 *Inverse Function* Homework 2

* *I can demonstrate conditions that guarantee existence of an inverse function for a given function*
* *I can develop and use strategies for recognizing invertible functions from tables and graphs*
* *I can develop and use strategies for finding rules of inverse functions*

1. For each of the below graphs, decide if the given function has an inverse. Explain why or why not.



**MULTIPLE CHOICE. Select the letter that is the inverse of the below functions:**

1.  2. 

a.)  a.) 

b.)  b.) 

c.)  c.) 

d.)  d.) 

3.

 If the function has an inverse, find it.

4. Find rules for inverses of the following functions. Make sure to write your final answer in function notation.

a. $h\left(x\right)=3x+5$ b. $k\left(x\right)=\frac{3}{5}x+4$

c. $t\left(x\right)=\frac{7}{x}+4$ d. $p\left(x\right)=\frac{7}{x+4}$

5. Given the below table of values for the function , find .

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | 1 | 2 | 3 | 4 | 5 |
|   | 6 | 3 | 2 | 5 | 8 |