**Inverse Functions**

There are a few different ways we can find the inverses of functions.

**1. Graphically**

The inverse of a function is found in a graph by reflecting the function over the line y=x.



Notice in each example how the original function is reflected over the line y=x.

**2. Table of Values**

To find the inverse function if you’re given a table, all you have to do is switch the x and y coordinates.

Example:

Original Inverse

|  |  |
| --- | --- |
| **x** | **y** |
| 0 | 3 |
| 1 | 5 |
| 2 | 7 |

|  |  |
| --- | --- |
| **x** | **y** |
| 3 | 0 |
| 5 | 1 |
| 7 | 2 |

**3. Equation**

To find the inverse of an equation you first switch the x and y variables. Then solve the new equation for y.

Example: y = 2x + 3

Switch the variables x and y and then solve for y. Show your work below.

Do Homework: WS + pg 501 #2-17