**4.2 – One to One Functions and Inverse Functions**

- A function is one-to-one if any two different inputs in the domain correspond to two different outputs in the range.

- A function is NOT one-to-one if two different inputs correspond to the same output.



**Horizontal Line Test** – If every horizontal line intersects the graph of a function f in at most one point, then f is one-to-one.

**Finding the Inverse of a function defined by a map**



**Finding the inverse of a function defined by a set of ordered pairs**

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**\*\* Domain of f = Range of f-1 Range of f = Domain of f-1**

**Verifying Inverse Functions**



The following graph is one-to-one. Draw the graph of its inverse



**Finding the Inverse Function**

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