

NAME: _____

P.I. A.G.3: Determine whether a relation is a function, by examining ordered pairs and inspecting graphs of relations

P.I. A2.A.38: Determine when a relation is a function

- Create a data table or set of four ordered pairs that is a function.
 - Add one ordered pair to the data set to make the data a relation but *not* a function.
- Describe the vertical line test for a graph and tell how it can determine if a graph is a function.

a. Answers may vary. Sample: (2, 3), (3, 4), (4, 5), (5, 6)

[1] b. (5, 8)

Answers may vary. Sample: Imagine drawing a vertical line through every point in a graph. If no line will intersect the graph more than once, the graph is a function. It works because if a vertical line

[2] intersected the graph twice, then two points would have the same x -value but two different y -values.