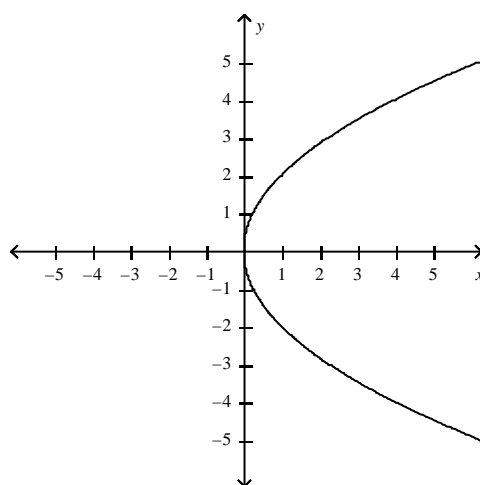


PROBLEM-OF-THE-DAY: ALGEBRA 1**WEEK:** September 24 to September 28 **DAY:** Tuesday

RISD Objective: Given a table, set of ordered pairs, graph, or equation, students will be able to determine whether or not the relation is a function.

PROBLEM #26

The graph below represents a relationship used to model the cross section of a car headlight. Is this relationship a function? Explain your reasoning.



MODEL SOLUTION #26

No, this relationship is not a function. A relation is a function if every member of the domain (inputs) is paired with only one member of the range (outputs). In this case, for positive x values, there are two different y values. Therefore, this graph is not the graph of a function. In other words, the graph fails the vertical line test.