## PROBLEM-OF-THE-DAY: ALGEBRA 1

**WEEK:** December 10 to December 14 **DAY:** Tuesday

**RISD Objective:** Given a scatter plot, students will be able to determine the correlation, draw a line of best fit, and use it to make a prediction.

## PROBLEM #74

Would you expect a positive, negative, or no correlation between the two sets of data. Explain your reasoning.

- a) amount of free time you have and the number of hours you work
- b) the weight of a teenager and his/her hair color
- c) # of roof repairs and the # of hail storms
- d) the height of a student and the city where he/she lives

## **MODEL SOLUTION #74**

- a) The correlation is negative; because there are only 24 hours in the day, the more you work, the less free time you have.
- b) There would be no correlation; there is no correlation between weight and hair color.
- c) The correlation is positive; as the number of hail storms increases, the number of roofs needing repairs increases
- d) There is no correlation; there would be no correlation between height and cities