Illumination: Line of Best Fit <http://illuminations.nctm.org/ActivityDetail.aspx?id=146> High School Math Subject Area: Algebra I **Grade Level Expectation: Strand 5:** Data and Probability **Concept C:** Represent Data Algebraically **Big Idea 2:** Select and use appropriate statistical methods to analyze data **GLE:** Given a scatter plot; determine a line of best fit

Summary: This site includes a generator tool that allows the viewer to input data into an activity and plot the data on a graph and then determine and equate a line of best fit.

Use in classroom: The Line of best fit is a valuable tool to determine the equation to find averages and being able to let the students to go onto the internet and use a tool that can determine the line of best fit will provide a visual for the students when we start this course material. This website will be a good introductory tool.

More Complicated Functions: Introduction to Linear Functions

<http://www.shodor.org/interactivate/lessons/IntroLinearFunction/>

High School Math

Subject Area: Algebra I

**Grade Level Expectation:**

**Strand 2:** Algebraic Relationships

**Concept D:** Identify and Compare Functions **Big Idea:** 2. Understand patterns, relations, and functions

**GLE:** Understand and compare the properties of linear and non-linear functions

Summary: This website is a brief look at the introduction of linear functions. It provides both the teacher and the student with a step by step review of the basics and getting started with linear functions. It also provides independent practice exercises that can be used in the classroom.

Use in the classroom: I would use this website on day one that we started linear and non-linear functions. This would help my teaching by giving me a road map on how to present linear functions to the classroom. This would also be a good way to get the students to be interactive with the computer and give them the opportunity to take a look at functions on their own.

The Math Worksheet Site.com – Number Lines

<http://themathworksheetsite.com/numline.html>

High School Math

**Subject Area:** Algebra I

**Grade Level Expectation:**

**Strand 1:** Number and Operations

**Concept A:** Read, write and compare numbers

**Big Idea 1:** Understand numbers, ways of representing numbers, relationships among numbers and number systems

**GLE:** Compare and order rational and irrational numbers, including finding their approximate locations on a number line.

Summary: This website is a worksheet generator that allows for you to choose a starting and ending number, and the increments that you wish to have to develop a number line that will allow the students to use.

Use in the Classroom: This website would be used as a worksheet maker for students to use as a worksheet to have number lines for math problems like box and whisker plots and to have a visual of numbers on a number line.