Part 1. Fungus in Panama. Last summer, Mr. Stump did an experiment in Panama, to study how seeds can defend themselves against fungus. He exposed seeds to 6 different species of fungus, and saw what fractions of the seeds were infected by each fungus. He wanted to test the following hypothesis:

**Hypothesis 1:** Common fungi are better able to infect seeds (so the slope is positive).

Here are the results of Mr. Stump’s research:

Here, “Frequency” means how common a fungus is (so, 2 means very common, and 1 means rare).

Questions:
1) Take a guess: What do you think each point represents?

2) Please draw a best-fit line through the plot.

3) What is the y-intercept of your best-fit line?

4) Chose 2 points on your best-fit line. What are they?

5) What is the slope of your best-fit line?

6) Is the slope positive or negative?

7) Is the hypothesis supported or not? Why?
**Part 2. Melting and Boiling Temperature.** You would like to test the following hypothesis:

**Hypothesis 2:** Chemicals with a high freezing temperature will also have a high boiling temperature (so there should be a positive slope).

Wikipedia lists the boiling and freezing temperatures of many chemicals. It looks like this:

Questions:
1) Please **draw a best-fit line** through the plot.

2) What is the **y-intercept** of your best-fit line?

3) Chose 2 points on your best-fit line. What are they?

4) What is the **slope** of your best-fit line?

5) Is the slope positive or negative?

6) Is the hypothesis supported or not? Why?