Looking at data through the lens of FUNCTION.

You will be given several sets of data. Complete these three steps for each set of data. You can record on this sheet, and/or use additional paper as needed to keep track of your ideas and findings.

1. **Conjecture:** "Eye ball" the data and make a conjecture as to whether the data could be modeled best using linear, exponential, quadratic or sine functions, or if it doesn't fit any of these models.

2. **Investigate:** Determine the family of functions the data best fits. Consider the different strategies you could use to determine this. Also justify your answer using multiple representations (graph, formula, table, verbal description).

3. **Analyze:** Decide how accurate the model you've determined is – that is, would it be reasonable to use it to predict values at times not listed on the initial table? (Either between data points or at times beyond the data set?) Why or why not?

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