1. Do problem **1.5**. When it says "summarize the information available in these plots", comment on direction and strength of associations, outliers, and other prominent features.

2. For the data set in problem **1.5**, do the following.

   (a) Give at least two possible ways in which the data set could be inadequate for building a useful prediction model for stream runoff near Bishop, California.

   (b) Does the data set result from an observational, or experimental, study?

   (c) Give at least three important questions that a person might have about the data set before performing inferential analysis on it.

   (d) Create some kind of plot or visualization (other than what you did in question 1) to answer one of the questions you listed in the last question part.

3. Do problem **1.4**. The term "summary plot" in the textbook refers to a scatter plot. When it says "summarize your results", comment on direction and strength of associations, outliers, and other prominent features.

4. For the data set in problem **1.4**, do the following.

   (a) Identify the predictor and the response.

   (b) Does the data enable you to make claims about causation, or merely association?

   (c) Does a straight-line mean function seem to be plausible for this data set? Why or why not?

   (d) Give the mean function and variance function (in terms of $\beta_0$, $\beta_1$, and $\sigma^2$) that would comprise a linear model for this data set.

5. Do problem **1.6**.