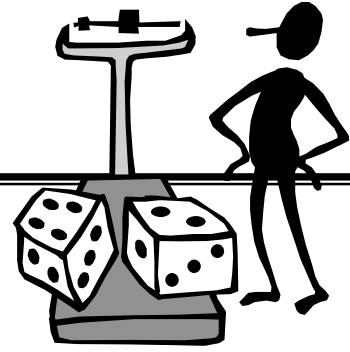


## Chapter 9: Regression Wisdom



### Key Vocabulary:

- extrapolation
- interpolation
- leverage
- influential point
- lurking variable
- homogeneous

1. If a histogram of residuals appears to be bimodal or multimodal, what might you conclude (or at least investigate) about the data?
2. Why is it important to examine a residual plot even if a scatterplot appears to be linear?
3. What is meant by extrapolation?
4. Why is extrapolation dangerous?
5. How is interpolation different than extrapolation?
6. How do you identify an outlier in a scatterplot?
7. What is meant by a point that has high leverage?
8. Explain the difference between an outlier and an influential point in a scatterplot.
9. Even if a strong association is observed between two variables, it may be wrong to assume that changing one variable will cause a change in the other variable. Explain why.
10. Why do scatterplots of summary statistics show less scatter than those of individual observations.