

- c. Construct the partial regression plots for this model. Does it seem that some variables currently in the model are not necessary?
- 4.16** In Problem 3.12, you were asked to fit a model to the clathrate formation data in Table B.8.
- a. Construct a normality plot of the residuals from the full model. Does there seem to be any problem with the normality assumption?
 - b. Construct and interpret a plot of the residuals versus the predicted response.
 - c. In Problem 3.12, you were asked to fit a second model. Compute the PRESS statistic for both models. Based on this statistic, which model is most likely to provide better predictions of new data?
- 4.17** In Problem 3.14, you were asked to fit a model to the kinematic viscosity data in Table B.10.
- a. Construct a normality plot of the residuals from the full model. Does there

- a. Perform a thorough residual analysis of these data.
- b. Identify the most appropriate transformation for these data. Fit the model and repeat the residual analysis.

5.10 Consider the pressure drop data in Table B.9.

- a. Perform a thorough residual analysis of these data.
- b. Identify the most appropriate transformation for these data. Fit the model and repeat the residual analysis.

5.11 Consider the kinematic viscosity data in Table B.10.

- a. Perform a thorough residual analysis of these data.
- b. Identify the most appropriate transformation for these data. Fit the model and repeat the residual analysis.