1. Exercise 1.14 in the text. When you calculate sample variance, do so by hand and show the values of $(x_i - \bar{x})$, $\sum_{i=1}^{n} x_i^2$ and $\sum_{i=1}^{n} x_i$. Use both formulas for sample variance, i.e. $\frac{1}{n-1}\sum_{i=1}^{n}(x_i - \bar{x})^2$ and $\frac{n}{n-1}[\frac{1}{n}\sum_{i=1}^{n} x_i^2 - (\frac{1}{n}\sum_{i=1}^{n} x_i)^2]$ and show they give the same result.

2. Exercise 1.16 in the text. Also, explain what insight you have gained regarding the formula for sample variance (hint: why do we divide by $n-1$ instead of n?).

3. Exercise 2.10 in the text. The answer to part c) is supposed to be a sentence explaining in words what the given event means.

4. Exercise 2.26 in the text.

5. Exercise 2.29 in the text.

6. Exercise 2.37 in the text.

7. Exercise 2.45 in the text.