1. Do Exercise 1.9 on page 19 of the text.

2. Do Exercise S-1.4 on page 24 of the text.

3. Do Exercise 2.1 on page 27 of the text.

4. Let $U \subseteq X \subseteq \mathbb{R}^n$.
   Suppose that $U$ is open in $X$. Prove that $X \setminus U$ is closed in $X$.

5. Do Exercise S-1.2 on page 23 of the text.

6. Consider the six surfaces depicted on Handout 1 (attached).
   All six surfaces are topologically equivalent. It is a fact, however, that all but one of them can be deformed into each another (by a so-called ambient isotopy) within $\mathbb{R}^3$. Identify the surface which is not isotopic to the other five within $\mathbb{R}^3$, by describing isotopies between all other five surfaces (using sketches and words).