1. Section 1.3 #1 (b)

2. Section 1.3 #2 (a), (b), (e), (h) (answers for (e),(h) are in the back of the book).

3. Section 1.3 #4 (a)-(d)

4. Section 1.3 #6 (a)

5. Section 1.5 #1 (a)-(c). For parts (a) and (b), find a function for which the negated statement holds.

6. Section 1.5 #5 (a), (b)

7. Section 1.8 #1 (a), (b) (be careful with the inverses!)

8. A function $f(x)$ is called odd if $f(-x) = -f(x)$. Give an example of an odd function which is invertible. Give an example of an odd function which is not invertible. Justify your answer.

9. Section 2.1 #2 (a)-(k) (the answers are in the back of the book. Try to figure it out on your own – make sure to JUSTIFY your answer, as the book does not justify anything).

10. Section 2.1 #7

11. Section 2.1 #14

12. Section 2.2 #5

13. Section 2.2 #9

14. Prove that $\lim_{n \to \infty} \frac{1}{2^n} = 0$.

15. Section 2.3 #2 (a), (b)

16. Section 2.3 #5 (a)

17. Section 2.3 #11 (a), (b)