Math 3000, Homework assignment #7

1. Start reading Section 2.2, up to p. 55.
2. Section 3.3: 1f,2abdef,10a,13
3. Section 3.4: 3c,4c,21
4. Prove: If x is rational, $x \neq 0$ and y is irrational, then xy is irrational. (Hint: prove it by contradiction.)
5. Prove that the set $\mathbb{Z}$ of integers is not bounded below.
6. Turn in all of the above.