CSci 1302 Assignment 11
Due Wedn., November 29.

Problem 1 (10 points). Exercise 11 p. 267.

Problem 2 (2 points). Exercise 14 p. 268.

Problem 3 (3 points). Exercise 22 b,c,e p. 268.

Problem 4 (6 points). Exercises 28c, 29 b,d p. 268.

Problem 5 (20 points). Exercises 9, 13 (hint: use the Division by Cases rule - see p. 19), 14, 24, 29, 33 pp. 281-282.
Use the proof methods that we used in class, NOT the element argument given in the textbook.

Problem 6 (4 points). Consider the following sets (where $U = \mathbb{N}$):

- $A = \{n \in \mathbb{N} \mid \exists k.n = k^2\}$

- $B = \{n \in \mathbb{N} \mid \exists k.n = k^4\}$

- $C = \{n \in \mathbb{N} \mid even(n)\}$

Compute the following sets. **Important:** Justify your answers using propositional logic.

1. $A \cup B$

2. $C^C \cap A$