## **CSE 103**

## Chapter 1, Section 1

## Problem No. 23

- **23.** Write each of these statements in the form "if p, then q" in English. [Hint: Refer to the list of common ways to express conditional statements.]
- a) It snows whenever the wind blows from the northeast.
- b) The apple trees will bloom if it stays warm for a week.
- c) That the Pistons win the championship implies that they beat the Lakers.
- **d)** It is necessary to walk 8 miles to get to the top of Long's Peak.
- e) To get tenure as a professor, it is sufficient to be world famous.
- **f**) If you drive more than 400 miles, you will need to buy gasoline.
- **g)** Your guarantee is good only if you bought your CD player less than 90 days ago.
- h) Jan will go swimming unless the water is too cold.

## Solution:

- a) If the wind blows from the northeast, then it snows.
- b) If it stays warm for a week, then the apple trees will bloom.
- c) If the Pistons win the championship, then they beat the Lakers.
- d) If you get to the top if Long's peak, then you must have walked eight miles.
- e) If you are world famous, then you will get tenure as a professor.
- f) If you drive more than 400 miles, then you will need to buy gasoline.
- g) If your guarantee is good, then you must have bought your CD player less than 90 days ago.
- h) If the water is not too cold, then Jan will go swimming.