

Your Name Here:

Each question is worth 2 points. 2 points will be awarded for correct answers. If you were on the right track but got the wrong answer I will award you 1 point.

A **physical copy** of this quiz must be turned in to me at the start of class on **9/10**.

For each of the following strings of characters:

- a. Prove that it is a sentence of PL.
- b. Identify its major operator.

1. $((A \vee \neg B) \supset \neg(A \supset B))$

2. $(\neg\neg A \vee B)$

3. $\neg(A \vee (B \wedge C))$

Translate the following English language sentences into sentences of PL.

When doing so, make use of the following translation key.

A = The computer is broken.
B = The mechanic fixed the computer.
C = Someone called the mechanic.

4. The computer is not broken, if the mechanic fixed the computer.

5. Either someone called the mechanic and the mechanic fixed the computer, or the computer is broken.

6. If the computer is broken but someone called the mechanic, then the mechanic did not fix the computer.