Name: *Y. Lamontagne*

Student ID: _____

Quiz: Translations

No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. Given the following symbolization key:

A: Aristotle was a biomechanist.
G: Gaius Julius was a tyrant.
I: Ibn Sina was a Constructivist.
P_1: Aristotle high fived Plato.
P_2: Gaius Julius high fived Plato.
P_3: Ibn Sina high fived Plato.
N: Aristotle was a Platonist.
W_1: Aristotle walked to Aegina.
W_2: Gaius Julius walked to Aegina.
W_3: Ibn Sina walked to Aegina.

Translate each English language statement into Propositional Logic.

    a. *(1 mark)* It is not the case that Aristotle was a biomechanist.

    b. *(3 marks)* Aristotle was a biomechanist or not a Platonist, if he walked to Aegina.

Translate each Propositional Logic statement into English.

    c. *(2 marks)* $\neg\neg N$

    d. *(3 marks)* $\neg(P_1 \wedge W_3) \rightarrow W_1$

a) $\neg A$

b) $W_1 \rightarrow (A \vee \neg N)$

c) It is not the case that Aristotle was not a Platonist.

d) If it is not the case that both Aristotle high fived Plato and Ibn Sina walked to Aegina then Aristotle walked to Aegina.