

Name: _____
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.

Strictly translate each English language statement into Propositional Logic.

- (2 marks) It is not the case that Aristotle was not a biomechanist.
- (3 marks) Ibn Sina was not a Constructivist if and only if, he high fived Plato and walked to Aegina.

Strictly translate each Propositional Logic statement into English.

- (1 mark) $\neg I$
- (3 marks) $\neg(W_2 \vee P_2) \iff \neg G$