Dawson	College:	Principles of	Mathematics	and Logic:	360-124-DW-S01:	Winter 2013

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.
- P₃: Ibn Sina high fived Plato.
- N: Aristotle was a Platonist.
- W_1 : Aristotle walked to Aegina.
- W_2 : Gaius Julius walked to Aegina.
- W₃: 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. $(3 \text{ marks}) \neg (P_1 \land W_3) \rightarrow W_1$