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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.

    a. *(2 marks)* It is not the case that Aristotle was not a biomechanist.

    b. *(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.

    c. *(1 mark)* $\neg I$

    d. *(3 marks)* $\neg(W_2 \vee P_2) \iff \neg G$

a) $\neg\neg A$

b) $\neg I \iff (P_3 \wedge W_3)$

c) It is not the case that Ibn Sina was a constructivist.

d) It is not the case that both Gaius Julius walked to Aegina and high fived Plato if and only if Gaius Julius was not a tyrant.