Logic pset 2

Resources: of HLW and

Instructions: Represent the propositional structure of each of the following sentences. First identify the atomic component sentences (i.e. sentences that do not contain connectives) and abbreviate each with a distinct capital letter. We have suggested letters after the sentences. Then represent the form of the original sentence using the symbols $\vee, \wedge, \neg, \rightarrow$ for the connectives "or", "and", "not", "if. . . then. . . ". Make sure to include parentheses, if necessary to disambiguate.

1. It's not true that if Ron doesn't do his homework then Hermione will finish it for him. (R,H)

2. Harry will be singed unless he evades the dragon's fiery breath. (S,E)

3. Aristotle was neither a great philosopher nor a great scientist. (P,S)

4. Mark will get an A in logic only if he does the homework or bribes the professor. (A,H,B)

5. Dumbledore will be killed, and either McGonagall will become head of school and Hogwarts will flourish, or else it won't flourish. (D,M,H)

6. Harry and Dumbledore are not both right about the moral status of Professor Snape. (H,D)