Translate the following sentences into formulas of propositional logic.

1. The world isn't destroyed only if Tom saves the unicorn.
2. Although Tom doesn't study business he opens up his own bar.
3. Tom dances if he is home alone, but if isn't home alone then he doesn't dance.
4. Tom doesn't learn how to love unless he kidnaps and dances with Dustin.
5. Tom doesn't bite Brad if and only if Brad doesn't lose his wife and estate.
6. If Tom gets to Paris and Emily is alive then Tom defeats the aliens, but if Tom doesn't get to Paris or Emily isn't alive then he doesn't.

Identify the propositional argument form of the following arguments.

1. If Leverkuhn is gifted and makes a deal with the devil, then he becomes a genius. Therefore, Leverkuhn doesn’t become a genius only if he isn’t gifted or doesn’t make a deal with the devil.
2. Jim doesn't open his own bar unless he studies business and his father helps him. Jim doesn't study business if he studies philosophy. Therefore if Jim studies philosophy or his father doesn't help him, he doesn't open his own bar.
3. Tonio suffers if Hans doesn’t love him, but Tonio won’t become a writer unless he suffers. Therefore, Tonio becomes a writer if and only if Hans doesn’t love him.
4. Old Jolyon doesn’t die happily unless he goes to the opera and has dinner with Irene. He doesn’t have dinner with Irene if and only if he doesn’t go the opera. Therefore, if Old Jolyon has dinner with Irene, he dies happily.
5. ‘If a moral theory is studied empirically then examples of conduct will be considered. And if examples of conduct are considered, principles for selecting examples will be used. But if principles for selecting examples are used, then moral theory is not being studied empirically. Therefore, moral theory is not studied empirically.’ (Immanuel Kant)

Additional examples.

1. Mark Twain wrote "Huckleberry Finn" and "Letters from the Earth".
2. If Sam Clemens called himself “Mark Twain,” he should have put it in quotation marks.
3. Twain wrote "Letters from the Earth" but he did not write "Lolita."
4. Neither rain nor snow nor sleet nor hail will keep me from putting this letter in your mailbox.
5. If neither rain nor snow nor sleet nor hail will prevent me from putting this letter in your mailbox, then if I am neither a postal worker nor a sociopath, then I must just be a good friend.

6. If Wittgenstein invented truth tables, then Hume critiqued the Argument from Design only if Kant pointed out that “existence” is not a predicate and Leibnitz called identical things “indiscernibles.”

7. If either Hume did not invent truth tables or Wittgenstein wrote the "Tractatus", then Russell’s paradox was bad news to Frege; but Kant denied that “existence” was a predicate only if Aristotelian logic dominated for two thousand years.