𝔄) Determine whether the following arguments are valid or invalid. If valid, determine whether the argument is sound or unsound and whether it is an instance of *modus ponens* or *modus tollens*. If invalid, determine which kind of fallacy it is, that is, whether it is the fallacy of affirming the consequent or the fallacy of denying the antecedent.

1. If the moon is made out of cheese, then birds don't fly.

   The moon is made out of cheese.

∴ Birds don't fly.

2. If it rains, then the floor gets wet.

   The floor is not wet.

∴ It doesn't rain.

3. If a thing is a circle, then it's not a square.

   A thing is not a square.

∴ A thing is a circle.

4. If I had Bill Gates' money, then I'd be rich.

   I don't have Bill Gates' money.

∴ I am not rich.

𝔅) Sometimes philosophers give arguments that contain *implicit premises*. An implicit premise is a claim upon which the validity of the argument depends but that is not explicitly expressed. A philosopher might rely on an implicit premise either intentionally or non-intentionally. When we reconstruct an argument, we have to make sure we state all premises upon which the validity of the argument depends, including the premises that are implicit in the argument as originally stated.
Give the implicit premise of the following arguments:

5. If California is in the US, then I've already been in the US.

∴ I've already been in the US.

6. If English is my mother language, then I don't make English mistakes.

∴ English is not my mother language.

℃) Come up with doubt-makers, if there are any, for the following propositions. Given that for Descartes someone knows a proposition *P* only if she can rule out doubt-makers for *P*, is it possible to know any of those propositions?

7. This is a zebra.

8. The Earth has 4.54 billion years.

9. Two plus two equals 4.

10. A ball is either entirely red or not red at any specific time.

11. The walls of my bedroom are yellow.

12. (Suppose that I am hallucinating and my hallucination is of a pink elephant.) I am seeing a pink elephant.

Argument to justify **2Z**

2Z: If I can conceive of something, then it is logically possible.

P = a situation involves a logical contradiction.
Q = we notice any logical contradiction when thinking about a situation very carefully.

Logical form of the argument:

If P, then Q.

∴ If **not** Q, then **no**t P.

Contraposition

2Z 1. If a situation involves a logical contradiction, then we would notice it when thinking about it very carefully.

∴ **2Z** 1C. So if we **DON'T** notice any logical contradiction when thinking about a situation very carefully, then it must be because a situation involves **NO** logical contradictions.

R = we don't notice any logical contradiction when thinking about a situation very carefully.
S = a situation involves no logical contradictions.
T = a situation is conceivable.

2Z 1C. If we don't notice any logical contradiction when thinking about a situation very carefully, then it must be because a situation involves no logical contradictions.

2Z 2. If a situation is conceivable, then we don't notice any logical contradiction when thinking about it very carefully. (def. of conceivable)

∴ If a situation is conceivable, then it must be because there are no logical contradictions.

Logical form of the argument:

If R, then S.

If T, then R.

∴ If T, then S.

Syllogism

* Notice that this conclusion is **2Z**.

* Syllogism is the form of the most famous argument:

        If something is a man, then it is mortal.

        Socrates is a man.

     ∴ Socrates is mortal.

* Syllogism and Contraposition are valid types of argument. That means that if you want to deny the conclusion, you have to deny one of the premises. You can't just deny the conclusion because in valid arguments it is logically impossible that the premises are true and the conclusion false.

* When one says that a proposition P *logically follows from* some other proposition Q, that just means that if Q is true, then so is P; or it is logically impossible that Q is true and P is false. That means that if you want to deny P, you have to deny Q.

* In valid arguments the conclusion *logically follows* from the premises.

<u>How to write a philosophy paper</u>

1) Basic structure:

　<u>Introduction</u>: no more than one paragraph.

　<u>First section</u>: give the best explanation of the theory/argument you will object to.

　<u>Second section</u>: explain your objection. Clearly state the premise(s) you'll reject. If you explained the justification for the premise you choose in the first section, there is no need to explain it here again.

　<u>Conclusion</u>: Clearly state the main points you made on the second section. No more than one paragraph.

2) Example:

(Introduction)

　　　According to Cartesian Dualism/Materialism, (brief exposition of the main thesis of the theory: no more than two lines). One of the arguments in favor/against this theory is called *Zombie Argument/Anti-Dualism Zombie Argument*. In this paper I will reject/endorse the first/second/third/… premise of the argument, according to which (state the premise).

(First section)

　　　The argument in favor/against is as follows: (state the argument)

　　　　Continue this section by giving the best explanation of the argument:

　　　　　　1) justification for each of the premises

　　　　　2) Explain how the premises support the conclusion

(Second section)

　　　I think that the justification for premise (write the number of the premise or briefly state the premise) is not convincing/not good/incorrect.

　　　　Continue this section by giving your reasons to disagree with the premise.

(Conclusion)

      In this paper I argued that premise (number of the premise or *according to which brief statement of the premise*) is not convincing/not good/incorrect. The reason I presented to support my claim was (brief explanation of your objection).

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• You don't have to follow the example I proposed. This is supposed to be a guide for those of you who are completely lost.

• I highly recommend that you follow part 1. Introduction, first section, second section and conclusion are the essential parts of ANY good philosophy paper.

Let me know if you have any questions!