

Necessary versus Sufficient Conditions.

Definition: A necessary condition for some state of affairs *S* is a condition that must be satisfied in order for *S* to obtain.

For example, a necessary condition for getting an A in 341 is that a student hand in a term paper. This means that if a student does not hand in a term paper, then a student will not get an A, or, equivalently, if a student gets an A, then a student hands in a term paper.

Definition: A sufficient condition for some state of affairs *S* is a condition that, if satisfied, guarantees that *S* obtains.

For example, a sufficient condition for getting an A in 341 is getting an A on every piece of graded work in the course. This means that if a student gets an A on every piece of graded work in the course, then the student gets an A.

Handing in a term paper is not a sufficient condition for getting an A in the course. It is possible to hand in a term paper and not to get an A in the course.

Getting an A on every piece of graded work is not a necessary condition for getting an A in the course. It is possible to get an A in the course even though one fails to get an A on some piece of graded work.

In her essay, Mary Anne Warren does not maintain that each of her five conditions is *individually sufficient* for being a person, though she thinks that some of them may be, and she thinks that the *conjunction* of the first three (consciousness, reasoning, and self-motivated activity) is probably sufficient for personhood. This means that she thinks it is probably true that if anything is conscious, able to reason, and engages in self-motivated activity, then that thing is a person. She maintains that satisfying all three of these conditions is sufficient for being a person.

Warren does not argue that any of her five conditions is *individually necessary*. But she does maintain that the *disjunction* of the five conditions is necessary. That is, she maintains that a necessary condition for personhood is that something satisfy *at least one* of these five conditions. In other words, she maintains that if none of these five conditions is true of something, then that thing is not a person.

Self-Test

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| T | F | 1. Being a mammal is a sufficient condition for being human. |
| T | F | 2. Being human is a sufficient condition for being a mammal. |
| T | F | 3. Being alive is a necessary condition for having a right to life. |
| T | F | 4. Being alive is a sufficient condition for having a right to life. |
| T | F | 5. If it is true that if P then Q, then P is a sufficient condition for Q. |
| T | F | 6. If it is true that if P then Q, then Q is a necessary condition for P. |
| T | F | 7. If it is true that if P is not the case, then Q is not the case, then P is a necessary condition for Q. |
| T | F | 8. If it is true that if P is not the case, then Q is not the case, then P is a sufficient condition for |

Q.

T F 9. Something is a brother if and only if it is a male sibling. This means that being a male sibling is both necessary and sufficient for something to be a brother.

For the answers click [here](#)