

Quiz 1

Andrew Player

September 17, 2020

Question # 1:

A counterexample is something that is used to show that an argument is invalid. It is a case, which is logically possible, where the conclusion of the argument is not guaranteed to be true, while the assumptions are true. Since you cannot guarantee the conclusion to be true given true assumptions, the argument is invalid.

Question # 2:

An inductive argument may be invalid, as it does not guarantee the truth of its conclusion, but instead it provides a high probability of truth. This is in contrast to a fallacious argument where the conclusion cannot be guaranteed to be true, nor is it likely to be true. Here's an example of an inductive argument: Every time I have torrented something from Pirate Bay, nothing has happened; so next time I torrent something from Pirate Bay, nothing will happen. Here's an example of a fallacious argument: My friend, who is a doctor, said that masks don't help to slow the spread of COVID, so masks don't help slow the spread of COVID.

Question # 3:

The Appeal to Authority is a logical fallacy. It involves asserting that a claim is true because an authority on the topic said that it was true. It is a fallacy because they lack any supporting evidence other than the claim made by the authority. Here's an example: John McAfee knows a lot about computers and cybersecurity, and he said Bitcoin will reach \$100,000 by the end of 2020, so that must be true.

Question # 4:

I read two sub-sections: ligatures and math symbols. This is what I learned. Ligatures first came about since metal cast fonts would have collisions between certain characters, so they simply made combined characters that fixed that issue. And now, we don't really need ligatures so they are largely a stylistic choice. Additionally, I learned that it is improper to use \times for multiplication and that it is better to insert the proper characters for equations.