**Argument By Analogy**

P1: P has quality/property X  
P2: Q is like P in relevant ways  
C: Q has quality/property X

Example: Humans solve mathematical equations, play chess, move about and feel pain. Robots are like humans. They solve mathematical equations, play chess and move about. Therefore, robots must feel pain (or it’s likely they do).

*Note that the example above raises the question of whether or not the ways in which Q is analogous to P are relevant. That is always a question that needs to be asked when making this kind of argument. Whether the analogy works, is a good one or is fitting.

**Reductio ad absurdum (sometimes called proof by contradiction or indirect proof)**

P1: if P then Q  
P2: Q is absurd  
C: P must not be true

Example: If determinism is true than no one is responsible for their own actions. But the idea that no one is responsible for what they do is absurd/unacceptable. It can’t be right. So determinism, must not be true.

*Note how this looks like a modus tollens, except that the second premise is not making the claim that Q is false, only that it is most likely false and it is highly unlikely to be true.