

*Deductive vs. Non-deductive Arguments*

Identify each of the following arguments as deductive or non-deductive.

1. Triangle ABC is an equilateral triangle. Triangle DEF is congruent to triangle ABC. Therefore, triangle DEF is equilateral.
2. People who exercise regularly have a longer life expectancy. Active Annie exercises regularly, but Lazy Larry does not. Therefore, Active Annie will outlive Lazy Larry.
3. I am certain that it will rain tomorrow. The meteorologists have forecasted a 90% chance of rain.
4. If I want to become a great philosopher, I need to hone my logic skills. I can only hone my logic skills if I study hard. I can't both study hard and watch cartoons. Therefore, if I watch cartoons, I won't become a great philosopher.
5. More people live in China than in Japan. I watched a documentary on population growth, which said that China was the most populous nation in the world.
6. Prometheus has a fever and lots of itchy red spots on his body. He hasn't had the chicken pox before and he never received a chicken pox vaccination. Prometheus must have the chicken pox.
7. Mary is taller than either Maria or Mariah. Mary is not taller than Mariah. Therefore, Mary is taller than Maria.
8. It is never wise to lie. Even though lying may seem like an easy way out of a situation, it sometimes creates bigger problems for you in the future.
9. The universe started expanding from a single speck at the moment of the big bang. It would require infinite time for the universe to expand infinitely from that speck, but infinite time has not passed since the big bang. Therefore, the universe is not infinite.
10. This worksheet has the same number of deductive arguments as non-deductive arguments. So far, there are five non-deductive arguments and four deductive arguments. This is the final argument on the worksheet. Therefore, this argument must be deductive.