Identify the argument pattern in these paragraphs. (modus ponens, modus tollens, hypothetical syllogism, disjunctive syllogism, dilemma, reductio as absurdum)

- 1. If I am thinking, then I exist. I am thinking. Therefore, I exist.
- 2. This man just told us that he's going to steal a ship, pick up a pirate crew in Tortuga, and raid, pillage, and pilfer his way around the Caribbean. If he were telling the truth, he wouldn't have told us that. So he can't be telling us the truth.
- 3. I am offering you two pills: one red, one blue. You can take the red pill or you can take the blue pill. It's up to you. But once you've made your choice, there's no turning back. If you take the blue pill, you'll forget this ever happened and you'll go on living your life in blissful ignorance. If you take the red pill, your life will be changed forever by what I'm about to show you. Thus, your choice is really between the life you know now and a totally different life that you can't begin to imagine.
- 4. The cats name is Samantha Peterson. I know this because it turned to look at me when I shouted "Samantha Peterson!" And if the cat turned and looked at me when I shouted "Samantha Peterson," then its name must be Samantha Peterson.
- 5. This man claims to be part of the resistance, but he's lying. The secret police attacked the cell he belonged to in New York City. He's the only one who got away. That means that either the secret police got sloppy or they wanted him to escape because he's working for them. And the secret police are never sloppy. So they wanted him to escape because he's are working for them.
- 6. There's a popular myth out there that the aliens were somehow involved in building the pyramids of Egypt. Hey, just for the sake of argument, the aliens really did build the pyramids. As anyone who's been to the pyramids can tell you, the stone use in building the pyramids were clearly shaped by simple hand tools. This would mean that despite having the ability to reach earth from some distant planet, the aliens would have had to rely on the Egyptian's basic hand tools to shape the rocks. It's ridiculous to think that any civilization with the technology for interplanetary travel wouldn't have use something like a laser—or at least a high-powered precision saw—to carve this stone used in the pyramids. That's why I don't believe that aliens were involved in building the pyramids.
- 7. The prosecution has presented a lot of evidence to show that the defendant killed her husband. But if my client had killed her husband, then she wouldn't want to get caught, would she? And if she didn't want to get caught, then she wouldn't have left all the evidence behind. So, you see, if my client were guilty, then she wouldn't have left behind all the evidence that the prosecution has presented!
- 8. You say I am some kind of demon. Well, either you're right about that, and I'm really a demon, or you're wrong about that, and I'm just a poor old country boy. Now, if I am a poor country boy, you better be nice to me. But if I'm actually a demon, then you have really better be nice to me, because I could cause you all kinds of trouble. So either way, you'd better be nice to me!

- 9. Part of an economist's job is to figure out why people do stupid things—or at least, why they do things that appear stupid. Take celebrity endorsements of consumer products, for instants. Companies hire celebrities to endorse their products even though the celebrities have no experience related to the product. For some reason, consumers respond to these endorsements. That is celebrity endorsements cause consumers to buy more of a product. Some people may think that this is just stupidity. But economist assume it's not. The reason that consumers wouldn't respond to celebrity endorsements if celebrity endorsements didn't signal a better product or a more trustworthy company. Thus, celebrity endorsements may signal a better product or a more trustworthy company. The puzzle for the economist is to figure out how celebrity endorsements do this.
- 10. After drinking a potion labeled "DRINK ME," which had made her smaller, Alice found her self trapped. There was only one door out of the room, but it was locked. The keys sat on top of the table, far out of her reach. Working about for the solution to her problem, she discovered a tiny cake labeled "EAT ME." She surmised that the cake might change her size too, although she wasn't sure in what way. It might make her grow back to her original size, or it might make her shrink even further. If it made her grow, then she would be able to reach the key and unlock the door. If it made her shrink, then she would be able to slip under the door. Therefore, she reason, she would be able to unlock the door or she would be able to slip under the door. Either way, she could escape the room!
- 11. The sun cannot be bigger than the whole solar system because it is a part of the solar system, and so for it to be bigger than a whole solar system, it would have to be bigger than itself. But that's absurd, nothing can be bigger than itself!
- 12. All of our actions are motivated either with respect for duty or by something else. Our actions will always treat others as ends-in-themselves if they are motivated by respect for duty, and they will never have moral worth if they are not motivated by respect for duty. Thus, either our actions treat others as ends-in-themselves or they have no moral worth.
- 13. As surprising as it may seem, I am now prepared to share with you some thing that philosophers have thought for centuries: a proof of the external world really exists. Observe: my right hand exist. My left hand exist, you will notice, also exist. Notice, however, that if there exists at least two hands, as these two hands exist here, then the external world exists.
- 14. Many medical texts suggests that the best way to treat bee stings is by scraping their stinger without squeezing or pulling the stinger. Some researchers once tested this by allowing honeybees to sting them repeatedly. They scraped some stingers out and pulled the others out. They said that if scraping works better than pulling, then scraping the stingers should leave a smaller welt. They found that scraping the stingers did not leave a smaller welt. Therefore, scraping the stingers out did not work better than pulling them out.
- 15. In the 1700s, before the innovation of modern chemistry, scientist believed that flammable materials contain the substance called "phlogiston." When something burned, it will start to lose phlogiston. This "Phlogiston Theory" of combustion explained many scientific observations, but it also raise some puzzles. One puzzle was that certain metals gain weight when they burned. But burning metals would cause them to lose weight if burning was the release of phlogiston. Thus, the puzzle lead some scientists suspect that the phlogiston theory was incorrect.

What conclusions can you infer from these premises? (Consider the argument forms)

- 1. If the SAT were a useful test, then it would test skills like research and critical analysis. It does not test those skills.
- 2. Either moral judgments are derived from a reason or they are caused by emotion. Moral judgments are not derived from our reason.
- 3. If the rich countries had become rich purely by stealing from the rest of the world, then the rest of the world would be poorer now than it used to be. But the rest of the world is richer now than it used to be, even though it is not nearly as wealthy as the richest countries.
- 4. The name tag on your mattress says "J. Watson." If your name tag says "J. Watson," then your first name is probably James.
- 5. Either you can measure the position of a subatomic particle or you can measure its momentum. A law physics known as the Heisenberg uncertainty principle entails that if you measure its position, then you cannot know its momentum precisely, but if you measure its momentum, then you cannot know its position precisely.