Inductive Vs Deductive Reasoning Worksheet

Definitions:

**Inductive Reasoning:** Making a general statement based on a number of observations (Guessing. Look for a pattern.)

**Deductive Reasoning:** Using known facts, definitions, and accepted properties in logical order to reach a conclusion or to show that a statement is true (Proving. Makes a rule.)

Were the following statements made by Inductive or Deductive Reasoning?

1. A chemistry experiment produces the same result 20 times. You conclude that it will always produce the same result.

2. Tim is Veronica’s cousin. Since David is Veronica’s twin brother, Tim is also David's cousin.

3. The school librarian notices that many students are requesting books about different countries in Africa. The librarian concludes that one of the social studies classes must be studying about Africa.

4. Julie notices that each term in the sequence 1, 3, 9, 27, …. Is found by multiplying the previous term by three. She concludes that the next two terms are 81 and 243.

5. Given the sequence 19, 23, 27, and 31 you conclude that the next term will be 35.

6. We know that all men are mortal. Since John is a man, John is mortal.

7. All of the people that you met in town are very strange. You conclude that everyone in town is very strange.