

## 4 Types of Deductive Arguments

### Modus Ponens

All A's are B's  
This is an A  
∴ This is a B

Real world example:

All Americans are rich (compared to people in the rest of the world);  
George Bush is an American;  
∴ George Bush must be rich.

### Modus Tollens

All A's are B's;  
This is not a B;  
∴ This is not an A.

Real world example:

All Americans are rich (compared to people in the rest of the world);  
Jane Doe is not rich;  
∴ Jane Doe must not be an American.

### Hypothetical Syllogism

If A, then B;  
If B, then C;  
∴ If A then, C.

Real world example:

If the people elect their own government, then the political system is democratic;  
If the political system is democratic, then the economy is prosperous;  
∴ If the people elect their own government, the economy must be prosperous.

### Disjunctive Syllogism:

Either A or B;  
Not A;  
∴ B.

Real world example:

All humans are either male or female;  
Jane Doe is not male;  
∴ Jane Doe must be female.