Deductive Invalidity

1. Denying the Antecedent

If A then B Not A ∴ Not B

Example:

If a Democrat is president, then a war is likely. But a Democrat is not president.

: A war is not likely.

2. Affirming the Consequent

If A then B

B

 \therefore A

Example:

If Bush runs for reelection, a Republican will surely win the presidency.

A Republican is sure to win the presidency

: Bush will run.