Famous Forms

Modus Ponens
A ⊃ B
A
▷ B

Modus Tollens
A ⊃ B
~B
▷ ~A

Hypothetical Syllogism
A ⊃ B
B ⊃ C
▷ A ⊃ C

Disjunctive Syllogism
A v B   -or-   A v B
~A   ~B
▷ B   ▷ A

Constructive Dilemma
A v B   -or-   A v B
A ⊃ C   A ⊃ C
B ⊃ C   B ⊃ D
▷ C   ▷ C v D

DeMorgan's Laws
~(A & B) ◁▷ ~A v ~B

~(A v B) ◁▷ ~A & ~B

Contraposition
A ⊃ B ◁▷ ~B ⊃ ~A

Reductio ad Absurdum

A	-or-	~A
B		B
~B		~B
▷ ~A		▷ A

Conditional Proof

A

B

▷ A ⊃ B

In the last two forms, the underline under 'A' at the top basically means "I'm assuming **A** but ONLY FOR THE SAKE OF ARGUMENT...it's not something I necessarily believe..." The vertical bar extending downward then indicates what follows ONLY WHILE assuming that underlined premise for argument's sake. But when the vertical bar ends, that indicates what is supposed to follow INDEPENDENTLY of the truth of the underlined assumption.

So in *reductio ad absurdum*, you suppose *just for argument's sake* that your opponent's view is correct. Under that assumption, you then argue to a contradiction. The ultimate conclusion drawn is that the opponent's view must be false. After all, you've basically shown that when you assume the opponent is right, an absurdity results. That's grounds for concluding unconditionally that your opponent is wrong.