There are five techniques for proving an implication:

- Equivalence to a previous theorem
- Antecedent implies consequent
- Consequent follows from antecedent
- Deduction – assume the conjuncts of the antecedent
- Contrapositive

The following table summarizes the first four of these techniques to prove $P_1 \wedge P_2 \Rightarrow Q$.

Equivalence to a previous theorem	Antecedent implies consequent	Consequent follows from antecedent	Deduction – assume the conjuncts of the antecedent
Start with entire theorem	Start with antecedent	Start with consequent	Start with consequent
$P_1 \wedge P_2 \Rightarrow Q$ $=$ $\langle \ldots \rangle$ $\ldots$ $=$ $\langle \ldots \rangle$ $\ldots$ $=$ $\langle \ldots \rangle$ $\ldots$ $=$ $\langle \ldots \rangle$ Previous theorem or *true* // all =	$P_1 \wedge P_2$ $=$ $\langle \ldots \rangle$ $\ldots$ $\Rightarrow$ $\langle \ldots \rangle$ $\ldots$ $=$ $\langle \ldots \rangle$ $\ldots$ $\Rightarrow$ $\langle \ldots \rangle$ Q // = or $\Rightarrow$	Q $=$ $\langle \ldots \rangle$ $\ldots$ $\Leftarrow$ $\langle \ldots \rangle$ $\ldots$ $\Leftarrow$ $\langle \ldots \rangle$ $\ldots$ $=$ $\langle \ldots \rangle$ $P_1 \wedge P_2$ // = or $\Leftarrow$	Q $=$ $\langle$Assume conjunct $P_1\rangle$ $\ldots$ $=$ $\langle \ldots \rangle$ $\ldots$ $=$ $\langle$Assume conjunct $P_2\rangle$ $\ldots$ $=$ $\langle \ldots \rangle$ Previous theorem or *true* // all =

The contrapositive of

$P_1 \wedge P_2 \Rightarrow Q$

is

$\neg Q \Rightarrow \neg(P_1 \wedge P_2)$

which can be proved using any of the above four proof techniques with $\neg Q$ as the antecedent and $\neg(P_1 \wedge P_2)$ as the consequent.