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contrapositive

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Author yark (2760) Entry type Definition Classification msc 03B05 Given an implication of the form

$$p \implies q$$

("p implies q") the contrapositive of this implication is

$$\neg q \implies \neg p$$

("not q implies not p").

An implication and its contrapositive are equivalent statements. When proving a theorem, it is often more convenient or more intuitive to prove the contrapositive instead.