Directions for Writing Proofs

• Write the statement to be proved.
• Clearly mark the beginning of your proof with the word *Proof*.
• Make your proof self-contained:
  – *Identify each variable used in the body of the proof;*
  – *Introduce only necessary variables and notation;*
  – *Use Lemmas to show significant but related ideas.*
• Write proofs in complete (English) sentences.

Common Mistakes

• Arguing from examples;
• Using the same letter to mean different things;
• Jumping to a conclusion;
• Begging the question (i.e. assuming true that which you want to prove);
• Using *if* when you mean *since*, *hence*, *thus*, *therefore*, *hencely*, *thusly*, *hereforthwith*, etc.