## A few on-line introductions to Mathematical Induction:

- 1. <a href="http://en.wikipedia.org/wiki/Mathematical\_induction">http://en.wikipedia.org/wiki/Mathematical\_induction</a> This Wikepedia rticle is a very good introduction. Read the first part (up though the section entitled "Polya's proof").
- 2. <a href="http://www.themathpage.com/aPreCalc/mathematical-induction.htm">http://www.themathpage.com/aPreCalc/mathematical-induction.htm</a> Another good introduction, with a few simple examples and some problems to check your understanding.
- 3. <a href="http://www.cut-the-knot.org/induction.shtml">http://www.cut-the-knot.org/induction.shtml</a> A simple explanation and example with links to many other examples (a few of those examples are quite advanced).

## 4. Three related pages:

- a. <a href="http://www.cc.gatech.edu/home/idris/AlgorithmsProject/ProofMethods/Induction/UnderstandingInduction.html">http://www.cc.gatech.edu/home/idris/AlgorithmsProject/ProofMethods/Induction/UnderstandingInduction.html</a> A more detailed explanation (informal proof) of why Mathematical induction is a legitimate proof technique.
- b. <a href="http://www.cc.gatech.edu/home/idris/AlgorithmsProject/ProofMethods/Induction/ProofByInduction.html#InductiveStep">http://www.cc.gatech.edu/home/idris/AlgorithmsProject/ProofMethods/Induction/ProofByInduction.html#InductiveStep</a> Proving something by induction
- c. <a href="http://www.cc.gatech.edu/home/idris/AlgorithmsProject/ProofMethods/Induction/ProofByInduction.html#InductiveStep">http://www.cc.gatech.edu/home/idris/AlgorithmsProject/ProofMethods/Induction/ProofByInduction.html#InductiveStep</a> Additional practice problems
- 5. <a href="http://www.acts.tinet.ie/induction">http://www.acts.tinet.ie/induction</a> 645.html Another introduction, with several interesting examples.
- 6. <a href="http://www.math.csusb.edu/notes/proofs/pfnot/node4.html">http://www.math.csusb.edu/notes/proofs/pfnot/node4.html</a> A page about proof techniques in general, of which Mathematical Induction is one.