Practice Problems:

Resources: Text book for Math 207 and reference books stated in the syllabus.

1. Show that the sum of the powers of 2 from 1 through n is 2n+1 – 1.

2. Prove that every amount of postage of 12 or more cents can be formed by using only 4-cent and 5-cent stamps.

3. Show that a full binary tree with height n contains exactly 2n -1 nodes.

First step of Mathematical Induction is

Basis Step

Inductive Step: Make sure you use the inductive hypothesis.