1. By induction prove that |sin nx| <= n |sinx|{\displaystyle |\sin nx|\leq n|\sin x|} {\displaystyle x} for any real number x and natural number n{\displaystyle n}.
2. Describe ring axioms   
   <https://en.wikipedia.org/wiki/Ring_(mathematics)>
3. Monoid is a Semigroup with identity element (true)
4. Conjecture and prove a summation formula for the sum of the first n positive odd integers.  
   <https://www.youtube.com/watch?v=TqpNDiqsz7k>
5. Prove n < 2n ∀n∈ Z+  using mathematical induction.
6. Translate into propositional logic