Homework 1:

a) Which statement is correct grammatically and mathematically?

١. Different criteria was used to evaluate the formulae given for possible exact solutions.
٢. Using different axis, one can simplify the computations.
٣. Every elements of an arbitrary group has a unique inverse.
٤. It is not our purpose to study or verify the number theory.
٥. A uncountable set can have a countable subset.
٦. In this section and next chapter, we will deal with cubic equations.
٧. The main idea is to apply geometric constructions and using algebraic methods.
٨. Our theorem provide an intrinsic classification of compact and closed curves.
٩. Let A is an infinite set. Then A has many finite subsets.
١٠. Note that this coincide with our previously terminology if K is convex and bounded.
١١. Let f be a surjective and one to one function. Then f is a bijection.
١٢. Suppose that Q denote the set of the irrational numbers.
١٣. By lemma ١, one can prove the fundamental theorem of calculus.
١٤. One must use the another method but direct one, to prove this generalizing theorem.
١٥. The symbol ε used in the definition of limit comes from the word “error”.
١٦. Unlike direct method, the indirect method is used to prove that this ring has a unit.
١٧. Positivity of a number is not a sufficient condition for positivity of its cube.
١٨. Rolle’s theorem which is one of the facts that dose not extend to complex functions.
١٩. Complexity of the computations recommends that teacher use a computer.
٢٠. It is important that the function is integrable and bounded above.

b) Translate into Farsi.

١. The advantages of using of PDEs not ODEs lies in the fact that we can generalize, extend and develop the theory to multivariable functions.
٢. Our method has the disadvantage of not being intrinsic, in fact it is extrinsic.
٣. For the convenience of the reader, we repeat the relevant material from [٧] without proofs, thus making our exposition self-contained.
٤. This product or division is independent of which member of the group g we choose to define it.