- (1) What valid conclusions can be drown from each of the following sentences by subalternation, conversion, obversion and contraposition?
  - 1) All tigers are mammals.
  - 2) Some athletes are not professionals.
  - 3) No metals are organic substances.
  - 4) All pearl hunters are good swimmers.
  - 5) Some drugs are not addictive substances.
  - 6) Some university graduates are chess players.
  - 7) No optimist is a person who knows life.
  - 8) Some active opponents of the corporative tax raise are not members of the Chamber of Commerce.
- (2) Prove that the sentence "All socialists are pacifists" logically entails the following sentences.
  - 1) Some pacifists are not non-socialists.
  - 2) Some non-pacifists are not socialists.
- (3) Prove that the sentence "No socialists are pacifists" logically entails the following sentences.
  - 1) Some socialists are non-pacifists.
  - 2) Some pacifists are non-socialists.
  - 3) Some non-pacifists are socialists.
  - 4) Some non-socialists are not non-pacifists.