The graduation thesis deals with student's preconceptions about force and motion. The thesis is divided to three sections. The first division picks up the threads of the bachelor thesis. Within this bachelor thesis there was performed a survey of ideas about relation of force and motion with students of the Faculty of Mathematics and Physics of Charles University and secondary schools' students. Results of survey based on a test with six qualitative problems are shown in tables and are commented. The way of processing of the results is closely described. In addition, the survey results are compared with similar studies performed in previous years in Czechoslovakia, mainly they were compared with results of similar research from the years 1981/82 and 1983/84. The survey results show existence of misconceptions, which persist despite school education. The survey of researches in this area is mentioned in the second division. In the third part of the thesis, I focus on the processing of research which was executed in terms of FCI test with the Faculty of Mathematics and Physics of Charles University first year students. The results are shown in tables and are commented again. The results of this research are compared with available results of similar researches from other countries. The individual misconceptions that were identified by FCI test, are shown in the third part too.