

An Investigation of 7th Grade Students' Misconceptions about Proportion Ratio*

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Keywords:	Abstract
Mathematics education, misconceptions, ratio and proportion.	This research aims to determine the misconceptions of seventh-grade students about the ratio-proportion subject. The study group of the research is composed of 35 seventh-grade students are selected by a convenience sampling method from two secondary schools depending on the Ministry of National Education. The research was carried out based on the case study, which is one of the qualitative research approaches. As a data collection tool, a test consisting of 8 open-ended questions developed for measuring misconceptions was used. The data obtained were analyzed with the content analysis method and misconceptions were presented in five categories. The distribution of data for each category was presented using the frequency-percentage table and sample student answers with direct quotations were included. In the research, it was concluded that students established additive relationship when they need to establish a multiplicative relationship, they used the direct proportion instead of the inverse proportion, they could not find the actual amount of the measurements given, they could not notice the equivalent ratios and establish a relationship between the two multiplicities. Based on the results of the research, it was suggested that daily life situations should be included in the teaching of the concepts of ratio and proportion.
Paper Type: Research	