ABSTRACT

Arry Mardani, (2020) **Analysis of Mathematical Critical Thinking Ability using *Graded Response Models*.**

Students' critical thinking skills are still rarely used, so it is affects the students' low mathematical critical thinking skills. Wrong one study that can improve critical thinking skills, namely learn through *Graded Response Models*. This research was conducted to: a) To analyze mathematics learning that uses thinking skills critical mathematical students through *Graded Response Models*, b) To analyze differences in relevant research results on mathematical critical thinking skills through *Graded Response Models* in mathematics learning, c) To analyze *Graded Response Models* learning reasoning on critical thinking skills students. The research method used in this research is method qualitative, with the type of research that is library research or literature study. The data used in this study are primary data and secondary data, as well Data analysis used by researchers is deductive, inductive, and historical. The results found are: a) Critical thinking 9 studies stated mathematical critical thinking skills through *Graded Response Models* able to achieve high critical thinking and 5 researchers stated ability Mathematical critical thinking through *Graded Response Models* is able to achieve thinking critical enough. So it can be concluded that the ability to think critical mathematics can be applied, developed, and improved through *Graded Response Models*, b) There are differences in the ability to think critically through *Graded Response Models* from several studies that have been reviewed, namely there are 3 aspects. 6 These aspects are critical reasoning skills, character, and critical attitudes, c) *Graded Response Models* learning reasoning towards students' critical thinking skills has a good level of effectiveness.

Keywords: Analysis of Critical Thinking Ability and *Graded Response Models*