**ABSTRACT**

Low the ability of thinking creative mathematics and self regulated learning of SMP ISLAM AL-ANHAR Sukabumi is the problems requiring of educator to create and apply a new strategy in learning process. This research uses mixed methode type embedded designe and type embedded experimental model by research design shaped *pre test- post test control group design.* The purpose of this research is learning that focuses on the use of Problem-Based Learning model which is estimated can improve thinking creative mathematics and self regulated learning. Population in this research were students of class VII of SMP Islam Al-Anhar. The sample selection is done randomly from the population as much as two classes. Instrument used in this research is to test the ability of thinking creative mathematics, self regulated learning questionnaire, observation sheet, and interview. Based on analyis of data obtained the following results: (1) Problem-Based Learning can improve the ability of thinking creative mathematics, (2) Problem-Based Learning can improve self regulated learning, (3) there’s no correlation of self regulated learning with the ability of thinking creative mathematics. Based on the interviews and observation, teacher accustomed to using Problem-Based Learning start from second meeting, and the students activity in following the model Problem-Based Learning ov the average rise of the criteria to be a bit much. Students follow the lesson with enthusiasm and delight. this means that the Problem-Based Learning model is more interesting and better than expository learning model.

Key words : Problem-Based Learning, thinking creative mathematics and self regulated learning