



<b>Thesis Title</b>	The results of Mathematics Learning Achievement in Graph by Problem Base Learning Supplemented with Polya Problem Solving Process of Mathayomsuksa 3 Students
<b>Author</b>	Mr. sittichai paphochan
<b>Institution</b>	Manchasuksa School, Manchakiri District, khonkaen Secondary Educational Service Area Office 25
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### ABSTRACT

The purposes of this research were to study and compare the achievement of mathematics before and after learning through mathematics instructional based on problem-based learning and Polya problem-solving of Mathayomsuksa 3 students. The samples group consisted of 34 students of manchasuksa School, Manchakiri District, khonkaen Province. The instruments used for data collection were mathematics lesson on Graph of 15 mathematics lesson, an achievement test and the mathematical problem solving process skills test. mean, percentage, standard deviation and dependent sample t-test were used for data analysis. The results of the research were as follows: 1. Mathematical problem solving process skills of the students learned through mathematics instructional activities based on problem-based learning and Polya problem-solving process after learning was the mean score was 75.88 percent and significantly higher than prior.

2. The mathematics achievement of the students learned through mathematics instructional activities based on problem-based learning and Polya problem-solving process after learning was significantly higher than prior.