The purpose of this research was to compare the quality determination of the cut-off score between the Wilcox and Angoff Methods based on the item response theory for a domain reference test with the multiple choice and the short answer. Research instruments were the equivalent domain reference tests with the 4 distracters of multiple choices and the short answers. Each test of all eight paper-tests consists of 30 items, entitle "FRACTIONS", that cut-off scores are determined by Wilcox and Angoff methods based on the item response theory. All items were constructed corresponding to the item specification. Four thousand and eighty-four Mathayomsuksa II students of 19 schools that located in Bangkok Metropolitan area (in academic year 1997 and 1998) were participated in the study.
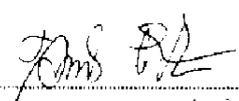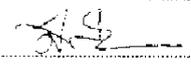
The results of the study were as follows:

1. As a result of multiple-choice tests, the cut-off scores of the first and the second paper-tests determining by Wilcox's method were at 20 and 19, respectively. The values of ability levels of the first and the second paper-tests determined by the Angoff's method were at -0.2611 and -0.2796, respectively.

2. As a result of short-answer tests, the cut-off scores of the first and the second paper-tests determining by Wilcox's method were at 20 and 21, respectively. The values of ability levels of the first and the second paper-tests determined by the Angoff's method were at 0.7181 and 0.7052 ,respectively.

3. It was found that the validity coefficients determining by the Carver's method of the multiple choice tests by methods of Wilcox and Angoff were 0.7022 and 0.7038; and the short answer tests were 0.7961 and 0.7862 ,respectively. The validity coefficients of the two methods were not significantly different at the .05 level.

4. It was found that the reliability coefficients determining by the method of Swaminathan, Hambleton, and Angina of the multiple choice tests by methods of Wilcox and Angoff were 0.8198 and 0.8005; and the short answer tests were 0.8131 and 0.8000, respectively. The reliability coefficients of the two methods were not significantly different at the .05 level.

5. The quality determination of the cut-off scores between the Wilcox and Angoff Methods based on the item response theory was not significantly different at .05 level.

ภาควิชา......วิจัยการศึกษา............................   ลายมือชื่อนิสิต..

สาขาวิชา.....การวัดและประเมินผลการศึกษา....   ลายมือชื่ออาจารย์ที่ปรึกษา.....................

ปีการศึกษา 2541.......................................   ลายมือชื่ออาจารย์ที่ปรึกษาร่วม.................