THE PREPARATION
OF AN ACHIEVEMENT TEST
IN ELEMENTARY ALGEBRA
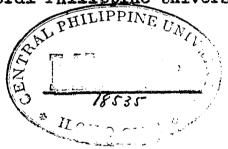

A Thesis

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of the Requirements for the Degree

Master of Arts in Education

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by

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CHAPTER I

INTRODUCTION

It has often been said that algebra is the bridge which leads from arithmetic into the realms of higher mathematics. And, according to Edgerton and Carpenter, since algebra is the next step beyond arithmetic in building the foundation of mathematics, every boy and girl should master it.[1]

Elementary Algebra is the first of a series of algebra subjects which all students who desire to pursue college work have to take. It is offered in the first year of high school and immediately precedes the subject of Intermediate Algebra or, as designated by local curricula, Advanced Algebra which is offered in the third year high school.

Statement of the problem. At present there is a virgin field for tests and measurements in the Philippines. Particularly, there is no standardized test for Elementary Algebra applicable to Filipino students. The Lankton First-Year Algebra Test was designed primarily for use in American schools. This study undertakes to make the initial steps in the preparation of a standardized achievement test in

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[1] Edward I. Edgerton and Perry A. Carpenter, Elementary Algebra (New Edition; Boston: Allyn and Bacon, 1947) p. ix.

Elementary Algebra which can be administered in all schools throughout the country.

Background and importance of the problem. In the preparation of her thesis, Anita S. Granpeñas started the making of a standardized test for third year algebra.[1] As a complement to her work, this study was made. Also, when Samuel Irving Colinco reported in his thesis that many of the teacher-made tests in algebra were defective,[2] it was thought that if standardized tests for algebra were available, the achievement of the students in this subject would be more accurately measured.

Delimitation. This study deals only with subject matter usually included in two semesters' work in Elementary Algebra. It does not include problems in arithmetic nor does it probe deeper and go into the realms of Intermediate Algebra.

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[1] Anita S. Granpeñas, "A Study of the Achievement in Advanced Algebra in Selected Iloilo High Schools" (Unpublished Master's thesis, Central Philippine University, Iloilo City, April, 1953).

[2] Samuel Irving Colinco, "A Survey of the Problems Used in Teacher-Made Periodic Tests in Algebra in the High Schools in Iloilo City" (Unpublished Master's thesis, Central Philippine College, Iloilo City, June, 1952).