

Evaluation of the effectiveness of the different methods of teaching algebra



EVALUATION OF THE EFFECTIVENESS OF THREE DIFFERENT METHOD OF TEACHING ALGEBRA (Your School's , the school where I work as a teacher, has an enrichment program to teach algebra to students weak in this area. Three teaching methods have been identified that could be used to improve students' skills in this area. The first is the traditional classroom teaching method (A), the second method incorporates visual tools and models such as graphic calculators (B), and the third method incorporates games such as chess (C).

I conducted an experiment designed to evaluate the effectiveness of the above three different methods of teaching algebra. Participating students were randomly assigned to one of the three treatments. An enrichment lesson was conducted with each group of students using each method. An algebra test was given at the end of the lesson. The below table shows the scores of the students for each method of teaching algebra.

A

48

38

20

16

95

B

91

37

53

91

80

<https://assignbuster.com/evaluation-of-the-effectiveness-of-the-different-methods-of-teaching-algebra/>

38

C

67

61

33

85

99

95

81

An ANOVA test would be performed to determine if the algebra test results provide sufficient evidence to indicate that the three teaching methods differ in effectiveness. Let $\alpha = 0.05$.

Hypotheses

The null hypothesis is that all treatment means are equal. That is, there is no difference in the effectiveness of the three different methods of teaching algebra.

The alternative hypothesis is that there is at least one inequality among the treatment means. That is, there is a difference in the effectiveness of the three different methods of teaching algebra.

$H_0: \mu_1 = \mu_2 = \mu_3$

H_1 : at least one equality does not hold