

## Abstract

The importance of learning mathematics cannot be separated from its role in all kinds of dimensions of life. For example many life problems that requires the ability to calculate and measure. But the increasing levels of education obtained by the subjects also more difficult. Especially for the high school level, where the latter institutions are the foundation of mathematics. Delivery methods which only rely on books and stationery that make the students will get bored quickly in learning activities. And the questions were deemed quite difficult to transform and solved. That is why mathematics is considered the scourge for the students. Because quite a lot of students also did not pass due to this lesson.

Made it necessary for a multimedia-based interactive applications to assist students in learning especially about quadratic equations, inequalities, and limit. With this application, it is expected to further stimulate interest in high school students to be more like mathematics. Especially for those chapters. This application is also expected to help students solve problems there with ease.

This application is made to replace the old ways of teaching are still manual. The system will be replaced with an interactive method based desktop applications, so students become more interested in learning basic math, especially Mathematics. This application will use the tools-tools in Macromedia Flash 8 with ActionScript as an authoring language, PHP and MySQL as database and other supporting software such as adobe photoshop and Dreamweaver.

**Keywords:** *interactive applications, authoring language, quadratic equations, inequalities, and limit.*