# Quadratic Tool

Justisiananto, Ahmad
Wisnujati, Galih

Quadratic function is a second degree polynomial function that is used in many subjects, such as mathematics, statistics, and architectures. The Purpose of this study is to find out application of the similarity concept to make a design of tool which can graph the quadratic function manually. This research was done by literature studies using relevant references to get variables that are used in this exploration. Then, these variables are used in Quadratic Tool to graph the quadratic function. By using the similarity concept, it can be obtained a formula, TP = TA^2(1/TS)+TA(AC/TS), when the value of TA is changed, the point P will move through a path shaped parabola, which is the representation of the quadratic function. key words: quadratic function, parabolic, similarity

**Awards Won:**