Quadratic equation

Solving mathematical problems has posed challenges to many students both in high schools and colleges. In a bit to simplify this course, many formulas have come detailing how to solve these problems. One such formula is the compound interest formula. This is an example of an exponential notation. It is an exponential formula because it has variables occurring as an exponents. It can be expressed as f (x) = a exponent x. In this, a is greater than 0, a is not equal to 1 and x is a real number. It is written as follows: -

In this notation, A is the total amount accrued plus the interest, P is the starting amount, r is the rate of interest charged and n represents the number of times the compounded interest occurs in a year while t is the time in years.

Quadratic equations are often represented in word and in uch occasion it is up to the students to formulate the equation. Here is an example: -

A research shows that five thousand school going children will attend a football match if the ticket price is thirty dollars. In the occasion that three dollars is added to the price, the number of students attending will be less by three hundred.

What pricing will give the highest amount for the week? What profit will they make if the price rises by two dollars?

For a person who was not in class, I will walk him/her through the following steps: - Take a variable x to represent the number o times three dollars are added to the original price ticket Formulate a quadratic equation to represent the values i. e. ax2 + bx + c = 0, where the vvalue of x is given by

The value of x you get has two notations; a negative value and a positive value.

A function in mathematics is a correspondence in association for one output for each input. In f of x, function f is an output and function x is an input e. g. in equation f(x) = 3x; a function f is associated with a variable thrice its value. For x = 10, f(x) = 30.

For g(x), it means that g is a function in relation to variable x. g does not hold any meaningful value, it is a randomly picked number the same to f. These two functions use different letters to accommodate more equations that have different functions of x. g(x)is the hardest of the two functions because of the long hours of concentration needed to understand it.