

Advance math

01

Equivalent expressions



Equivalent expressions are defined as the expressions that will have the same value, even if they look different.

For example : Simplify the following expression $x(x - 5) + 4(x - 3) - 8$

A) $(x - 10)(x + 2)$

C) $(x - 5)(x + 4)$

B) $(x - 4)(x + 3)$

D) $(x)(x) - x - 8$

02

Quadratic equation



A quadratic equation is a second - degree polynomial equation in a single variable. Standard form

$$ax^2 + bx + c = 0$$



We use this formula to find the roots of the equation $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$



Nonlinear Functions are not linear and they are not in the form of $f(x) = ax + b$
Some examples of nonlinear functions :

1) Quadratic Function : $f(x) = x^2$

2) Exponential Function : $f(x) = 4^x$

