

Answer on Question #85472 – Math – Algebra

Question

Explain how a quadratic equation is fundamentally different from a linear equation.

Solution

A quadratic equation is fundamentally different from a linear equation in two related ways:

- 1) A quadratic equation is the second-degree equation which means that it always includes the second-degree variable and no variables of the third degree or higher while a linear equation only includes a variable of the first degree.
- 2) A quadratic equation always has from 0 to 2 different roots in \mathbb{R} (real numbers) and from 1 to 2 different roots in \mathbb{C} (complex numbers) while a linear equation always has 1 solution.