

Vieta's Formula in Quadratic Equations

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Let

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Let α

Vieta's Formula in Quadratic Equations

▶ Start

Let α, β

Vieta's Formula in Quadratic Equations

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Let α, β be the roots

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Let α, β be the roots of the equation.

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Let α, β be the roots of the equation.

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

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Let α, β be the roots of the equation.

$$ax^2 + bx + c = 0 \quad (a \neq 0)$$

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Let α, β be the roots of the equation.

$$ax^2 + bx + c = 0 \quad (a \neq 0)$$

$$\alpha + \beta = -\frac{b}{a}$$

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Let α, β be the roots of the equation.

$$ax^2 + bx + c = 0 \quad (a \neq 0)$$

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Let α, β be the roots of the equation.

$$ax^2 + bx + c = 0 \quad (a \neq 0)$$

$$\alpha + \beta = -\frac{b}{a}, \quad \alpha\beta = \frac{c}{a} \quad \text{▶ proof}$$

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Vieta's Formula in Quadratic Equations

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$$\begin{cases} (x - \alpha)(x - \beta) = 0 \end{cases}$$

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$$\begin{cases} (x - \alpha)(x - \beta) = 0 \\ ax^2 + bx + c = 0 \quad (a \neq 0) \end{cases}$$

$$\begin{cases} x^2 \\ \end{cases}$$

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$$\begin{cases} (x - \alpha)(x - \beta) = 0 \\ ax^2 + bx + c = 0 \quad (a \neq 0) \end{cases}$$

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$$\begin{cases} (x - \alpha)(x - \beta) = 0 \\ ax^2 + bx + c = 0 \quad (a \neq 0) \end{cases}$$

$$\begin{cases} x^2 - (\alpha + \beta) \end{cases}$$

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$$\begin{cases} (x - \alpha)(x - \beta) = 0 \\ ax^2 + bx + c = 0 \quad (a \neq 0) \end{cases}$$

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