# Quadratic Formulas - Purpose to Formula
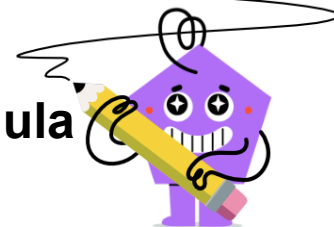
## 1

### What is the equation for this?

Find the number and type of roots (solutions)

| A | B |
|---|---|
| $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ | $x = \dfrac{-b}{2a}$ |
| C $\Delta = b^2 - 4ac$ | |
| | |

## 2

### What is the equation for this?

Find the roots (solutions) of the equation

| A | B |
|---|---|
| $\Delta = b^2 - 4ac$ | $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ |
| C $x = \dfrac{-b}{2a}$ | |
| | |

## 3

### What is the equation for this?

Find the vertex (turning point) of the graph

| A | B |
|---|---|
| $x = \dfrac{-b}{2a}$ | $\Delta = b^2 - 4ac$ |
| C $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ | |
| | |