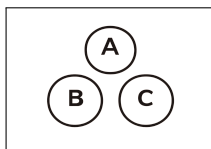


12 Factoring and Solving Quadratic Formula

A



$$b = 10, a = 1, c = 2$$

$$y = x^2 + 10x + 2$$

$$x = -b \pm \sqrt{b^2 - 4ac}/2a$$

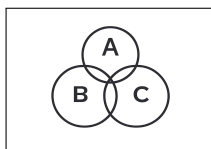
$$x = -10 \pm \sqrt{10^2 - 4(1)(2)}/2(1)$$

$$x = -10 \pm \sqrt{100 - 8}/2$$

$$x = -10 \pm \sqrt{92}/2$$

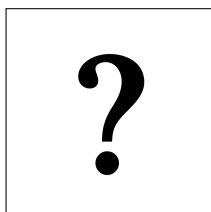
$$x = -10 \pm 2\sqrt{23}/2$$

$$x = -5 + \sqrt{23}, -5 - \sqrt{23}$$



$$ax^2 + bx + c = 0, a \neq 0$$

$$x = -b \pm \sqrt{b^2 - 4ac}/2a$$



$$a = 4, b = 20, c = 3$$

$$y = 4x^2 + 20x + 3$$

$$x = -b \pm \sqrt{b^2 - 4ac}/2a = ?$$

12

Factoring and Solving
Quadratic Formula

A



$$a = 4, b = 20, c = 3$$

$$y = 4x^2 + 20x + 3$$

$$x = -b \pm \sqrt{b^2 - 4ac} / 2a$$

$$x = -20 \pm \sqrt{20^2 - 4(4)(3)} / 2(4)$$

$$x = -20 \pm \sqrt{400 - 48} / 8$$

$$x = -20 \pm \sqrt{352} / 8$$

$$x = -20 \pm 4\sqrt{22} / 8$$

$$x = -5 \pm \sqrt{22} / 2$$