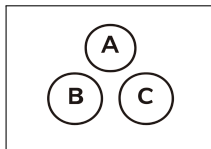
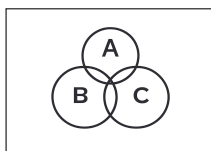


12 Factoring and Solving Quadratic Formula

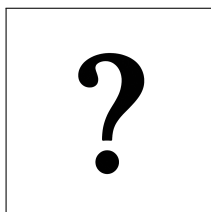
C



$$\begin{aligned}
 a &= 3, b = 2, c = 1 \\
 y &= 3x^2 + 2x + 1 \\
 x &= \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \\
 x &= \frac{-2 \pm \sqrt{2^2 - 4(3)(1)}}{2(3)} \\
 x &= \frac{-2 \pm \sqrt{4 - 12}}{6} \\
 x &= \frac{-2 \pm \sqrt{-8}}{6} \\
 x &= \frac{-2 \pm 2\sqrt{2}i}{6} \\
 x &= \frac{-1 \pm \sqrt{2}i}{3} \\
 x &= -1 + \sqrt{2}i/3, -1 - \sqrt{2}i/3
 \end{aligned}$$



$$\begin{aligned}
 ax^2 + bx + c &= 0, a \neq 0 \\
 x &= \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}
 \end{aligned}$$



$$\begin{aligned}
 a &= 6, b = 4, c = 2 \\
 y &= 6x^2 + 4x + 2 \\
 x &= \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = ?
 \end{aligned}$$

12 Factoring and Solving Quadratic Formula

C



$$a = 6, b = 4, c = 2$$

$$y = 6x^2 + 4x + 2$$

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

$$x = -4 \pm \sqrt{4^2 - 4(6)(2)}/2(6)$$

$$x = -4 \pm \sqrt{16 - 48}/12$$

$$x = -4 \pm \sqrt{-32}/12$$

$$x = -4 \pm 4\sqrt{2}i/12$$

$$x = -1 \pm \sqrt{2}i/3$$

$$x = -1 + \sqrt{2}i/3, -1 - \sqrt{2}i/3$$