

$$\boxed{a}x^2 + \boxed{b}x + \boxed{c} = 0 \implies x = \frac{\boxed{-}b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$\boxed{a}x^2 + \boxed{b}x + \boxed{c} = 0 \quad (a=1, b=-6, c=-7)$$

$$x = \frac{\boxed{-}b \pm \sqrt{b^2 - 4ac}}{2a \leftarrow -1}$$

$$x = \frac{\boxed{-}(-6) \pm \sqrt{(-6)^2 - 4 \times 1 \times (-7)}}{2 \times 1}$$

$$= \frac{+6 \pm \sqrt{36 + 28}}{2}$$

$$= \frac{+6 \pm \sqrt{64}}{2}$$

$$= \frac{+6 \pm 8}{2} \left\{ \begin{array}{l} \frac{+6+8}{2} = \frac{14}{2} = \boxed{7} \\ \frac{+6-8}{2} = \frac{-2}{2} = \boxed{-1} \end{array} \right.$$

$$= 7, -1$$

$$\boxed{a}x^2 + \boxed{b}x + \boxed{c} = 0 \quad (a=1, b=+3, c=0)$$

$$x = \frac{\boxed{-}b \pm \sqrt{b^2 - 4ac}}{2a \leftarrow -1}$$

$$x = \frac{\boxed{-}(+3) \pm \sqrt{(+3)^2 - 4 \times 1 \times 0}}{2 \times 1}$$

$$= \frac{-3 \pm \sqrt{9}}{2}$$

$$= \frac{-3 \pm 3}{2} \left\{ \begin{array}{l} \frac{-3+3}{2} = \frac{0}{2} = \boxed{0} \\ \frac{-3-3}{2} = \frac{-6}{2} = \boxed{-3} \end{array} \right.$$

$$= 0, 3$$

$$\boxed{a}x^2 + \boxed{b}x + \boxed{c} = 0 \quad (a=3, b=7, c=1)$$

$$x = \frac{\boxed{-}b \pm \sqrt{b^2 - 4ac}}{2a \leftarrow 3}$$

$$x = \frac{\boxed{-}(+7) \pm \sqrt{(+7)^2 - 4 \times 3 \times 1}}{2 \times 3}$$

$$= \frac{-7 \pm \sqrt{49 - 12}}{6}$$

$$= \frac{-7 \pm \sqrt{37}}{6}$$

約分を忘れるな

$$= \frac{\cancel{6}^3 \pm \cancel{2}^1 \sqrt{37}}{\cancel{2}^1} = 3 \pm \sqrt{37}$$

$$\boxed{a}x^2 + \boxed{b}x + \boxed{c} = 0 \quad (a=5, b=-2, c=-7)$$

$$x = \frac{\boxed{-}b \pm \sqrt{b^2 - 4ac}}{2a \leftarrow 5}$$

$$x = \frac{\boxed{-}(-2) \pm \sqrt{(-2)^2 - 4 \times 5 \times (-7)}}{2 \times 5}$$

$$= \frac{+2 \pm \sqrt{4 + 140}}{10}$$

$$= \frac{+2 \pm \sqrt{144}}{10}$$

$$= \frac{+2 \pm 12}{10} \left\{ \begin{array}{l} \frac{+2+12}{10} = \frac{14}{10} = \boxed{\frac{7}{5}} \\ \frac{+2-12}{10} = \frac{-10}{10} = \boxed{-1} \end{array} \right.$$

$$= \frac{7}{5}, -1$$