

1.4 Ex 5

Day 2

①

$$X = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

⑨ Solve $x^2 - 4x = -2$

$$\begin{array}{r} x^2 - 4x = -2 \\ +2 \quad +2 \\ \hline \end{array}$$

$$x^2 - 4x + 2 = 0$$

$a = 1$

$b = -4$

$c = 2$

$$X = \frac{-(-4) \pm \sqrt{(-4)^2 - 4(1)(2)}}{2(1)}$$

$$X = \frac{4 \pm \sqrt{16 - 8}}{2}$$

$$X = \frac{4 \pm \sqrt{8}}{2}$$

$$X = \frac{4 \pm 2\sqrt{2}}{2}$$

$$X = \frac{4}{2} \pm \frac{2\sqrt{2}}{2}$$

$$X = 2 \pm \sqrt{2}$$

$$\begin{aligned} X &= 2 + \sqrt{2} \\ X &= 2 - \sqrt{2} \end{aligned}$$

$$\begin{array}{l} \sqrt{8} \\ \uparrow \\ \textcircled{2} \cdot 4 \\ \uparrow \\ \textcircled{2} \cdot 2 \\ \hline 2\sqrt{2} \end{array}$$

1.4 **Ex 6**

Solve $2x^2 = x - 4$
 $\frac{-x + 4}{-x + 4}$

(2)

$a = 2$

$b = -1$

$c = 4$

$2x^2 - x + 4 = 0$

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

$$= \frac{1 \pm \sqrt{1 - 32}}{4}$$

$$= \frac{1 \pm \sqrt{-31}}{4}$$

$$= \frac{1 \pm i\sqrt{31}}{4}$$

$$x = \frac{1 + i\sqrt{31}}{4}$$

$$x = \frac{1 - i\sqrt{31}}{4}$$