

二次方程式 いろいろな計算2

NO.2

名前

/6 点

◆次の方程式を解きなさい

$$(1) (x - 5)^2 - 3 = 0$$

$$(2) (x + 2)^2 - 17 = 0$$

$$(3) (x + 5)(x - 8) = -12$$

$$(4) (x + 5)(x - 2) = x - 2$$

$$(5) 7(x + 10)^2 = 56$$

$$(6) (x + 2)^2 = -x + 7$$

解答

$$(1) \quad (x - 5)^2 = 3$$

$$x - 5 = \pm \sqrt{3}$$

$$x = 5 \pm \sqrt{3}$$

$$(2) \quad (x + 2)^2 = 17$$

$$x + 2 = \pm \sqrt{17}$$

$$x = -2 \pm \sqrt{17}$$

$$(3) \quad x^2 - 3x - 40 = -12$$

$$x^2 - 3x - 28 = 0$$

$$(x + 4)(x - 7) = 0$$

$$x = -4, 7$$

$$(3) \quad x^2 + 3x - 10 = 0$$

$$(x - 1)(x - 5) = 0$$

$$x = 1, 5$$

$$(4) \quad x^2 + 3x - 10 = x - 2$$

$$x^2 + 2x - 8 = 0$$

$$(x - 2)(x + 4) = 0$$

$$x = 2, -4$$

$$(5) \quad (x + 10)^2 = 8$$

$$x + 10 = \pm 2\sqrt{2}$$

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

$$(6) \quad x^2 + 4x + 4 = -x + 7$$

$$x^2 + 5x - 3 = 0$$

$$x = \frac{-5 \pm \sqrt{25 + 12}}{2}$$

$$= \frac{-5 \pm \sqrt{37}}{2}$$