

## 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

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

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

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

$$(4) (x + 1)(x - 3) = 3x + 3$$

$$(5) 4(x + 3)^2 = 8$$

$$(6) (x + 2)(x - 8) = 2x^2 - 7$$

## 解答

$$\begin{aligned}
 (1) \quad (x - 5)^2 &= 3 \\
 x - 5 &= \pm \sqrt{3} \\
 x &= 5 \pm \sqrt{3}
 \end{aligned}$$

$$\begin{aligned}
 (2) \quad (x + 2)^2 &= 17 \\
 x + 2 &= \pm \sqrt{17} \\
 x &= -2 \pm \sqrt{17}
 \end{aligned}$$

$$\begin{aligned}
 (3) \quad x^2 - 3x - 40 &= -12 \\
 x^2 - 3x - 28 &= 0 \\
 (x + 4)(x - 7) &= 0 \\
 x &= -4, 7
 \end{aligned}$$

$$\begin{aligned}
 (3) \quad x^2 + 3x - 10 &= 0 \\
 (y - 1)(y - 5) &= 0 \\
 y &= 1, 5
 \end{aligned}$$

$$\begin{aligned}
 (4) \quad x^2 - x - 3 &= 3x + 3 \\
 x^2 - 5x - 6 &= 0 \\
 (x + 1)(x - 6) &= 0 \\
 x &= -1, 6
 \end{aligned}$$

$$\begin{aligned}
 (5) \quad (x + 3)^2 &= 2 \\
 x + 3 &= \pm \sqrt{2} \\
 x &= -3 \pm \sqrt{2}
 \end{aligned}$$

$$\begin{aligned}
 (6) \quad x^2 - 6x - 16 - 2x^2 + 7 &= 0 \\
 -x^2 - 6x - 9 &= 0 \\
 x^2 + 6x + 9 &= 0 \\
 (x + 3)^2 &= 0 \\
 x &= -3
 \end{aligned}$$