

氏名 ( ) 点数 \_\_\_\_\_

$$(1) \quad x^2 - 4x + 3 = 0$$

$$(x-3)(x-1) = 0$$

$$\underline{x = 3, 1}$$

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

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

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

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

$$x^2 - 4x + 4 = 10 - 3x$$

$$x^2 - x - 6 = 0$$

$$(x+2)(x-3) = 0$$

$$\underline{x = -2, 3}$$

$$(4) \quad 4x^2 - 5 = 0$$

$$4x^2 = 5$$

$$x^2 = \frac{5}{4}$$

$$\underline{x = \pm \frac{\sqrt{5}}{2}}$$

$$(5) \quad 2x^2 + 8x - 24 = 0$$

$$x^2 + 4x - 12 = 0$$

$$(x+6)(x-2) = 0$$

$$\underline{x = -6, 2}$$

$$(6) \quad 3x^2 - 8 = 2(x+2)(x-6)$$

$$3x^2 - 8 = 2(x^2 - 4x - 12)$$

$$3x^2 - 8 = 2x^2 - 8x - 24$$

$$x^2 + 8x + 16 = 0$$

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

$$\underline{x = -4}$$

$$(7) \quad x^2 + 2x - 1 = 0$$

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

$$x = \frac{-2 \pm \sqrt{8}}{2}$$

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

$$\underline{x = -1 \pm \sqrt{2}}$$

$$(8) \quad 3x^2 + 2x - 1 = 0$$

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

$$x = \frac{-2 \pm \sqrt{16}}{6}$$

$$x = \frac{-2 \pm 4}{6}$$

$$x = \frac{2}{6}, -\frac{6}{6}$$

$$\underline{x = \frac{1}{3}, -1}$$

$$(9) \quad (x-1)^2 - 5(x-1) - 24 = 0$$

$$x-1 = A \text{ とおく}$$

$$A^2 - 5A - 24 = 0$$

$$(A-8)(A+3) = 0$$

$$(x-1-8)(x-1+3) = 0$$

$$(x-9)(x+2) = 0$$

$$\underline{x = 9, -2}$$

$$(10) \quad (x-3)^2 - (x-3) - 20 = 0$$

$$x-3 = A \text{ とおく}$$

$$A^2 - A - 20 = 0$$

$$(A+4)(A-5) = 0$$

$$(x-3+4)(x-3-5) = 0$$

$$(x+1)(x-8) = 0$$

$$\underline{x = -1, 8}$$