



1. 次の方程式を解きなさい。

$$(1) x^2 + 10x - 39 = 0$$

$$(x + 13)(x - 3) = 0$$

$$(2) x^2 + 3x - 70 = 0$$

$$(x + 10)(x - 7) = 0$$

$$(3) x^2 - 16x + 55 = 0$$

$$(x - 5)(x - 11) = 0$$

$$(4) x^2 - 8x - 48 = 0$$

$$(x + 4)(x - 12) = 0$$

$$(5) x^2 - 14x = 0$$

$$x(x - 14) = 0$$

$$(6) x^2 - 24x + 144 = 0$$

$$(x - 12)^2 = 0$$

$$(7) x^2 - 9 = 0$$

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

$$(8) x^2 - 49 = 0$$

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

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

$$(x + \sqrt{2})(x - \sqrt{2}) = 0$$

$$(10) -x^2 - x + 20 = 0$$

$$(-1) \times (-x^2 - x + 20) = (-1) \times 0$$

$$x^2 + x - 20 = 0$$

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

$$(11) -x^2 + 13x = 0$$

$$(-1) \times (-x^2 + 13x) = (-1) \times 0$$

$$x^2 - 13x = 0$$

$$x(x - 13) = 0$$

$$(12) 2x^2 + 4x - 16 = 0$$

$$\frac{1}{2} \times (2x^2 + 4x - 16) = \frac{1}{2} \times 0$$

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

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

$$(13) \frac{1}{2}x^2 + \frac{1}{2}x - 15 = 0$$

$$2 \times \left( \frac{1}{2}x^2 + \frac{1}{2}x - 15 \right) = 2 \times 0$$

$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

$$(14) -2x^2 - 2x + 24 = 0$$

$$\left( -\frac{1}{2} \right) \times (-2x^2 - 2x + 24) = \left( -\frac{1}{2} \right) \times 0$$

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

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

$$(15) x^2 = 0$$

(1) $x = -13, x = 3$	(2) $x = -10, x = 7$	(3) $x = 5, x = 11$
(4) $x = -4, x = 12$	(5) $x = 0, x = 14$	(6) $x = 12$
(7) $x = \pm 3$	(8) $x = \pm 7$	(9) $x = \pm \sqrt{2}$
(10) $x = 4, x = -5$	(11) $x = 0, x = 13$	(12) $x = -4, x = 2$
(13) $x = -6, x = 5$	(14) $x = 3, x = -4$	(15) $x = 0$

