

2次方程式

年 組 名前

/21

■ 次の方程式を解きなさい。

① $7x^2 + 8x + 1 = 0$

⑧ $x^2 - 13x - 30 = 0$

⑮ $2x^2 - 3x - 2 = 0$

② $x^2 - 7x - 8 = 0$

⑨ $5x^2 + 7x + 2 = 0$

⑯ $2x^2 - 3x = 0$

③ $x^2 - 9x - 10 = 0$

⑩ $x^2 + 8x + 3 = 0$

⑰ $x^2 + 3x + 2 = 0$

④ $x^2 - 7x + 10 = 0$

⑪ $x^2 + x - 30 = 0$

⑱ $3x^2 - 7x + 3 = 0$

⑤ $5x^2 - 2x = 0$

⑫ $36x^2 - 1 = 0$

⑲ $x^2 - 3x - 54 = 0$

⑥ $2x^2 + 3x - 5 = 0$

⑬ $x^2 + 16x + 64 = 0$

⑳ $2x^2 + 2x - 3 = 0$

⑦ $16x^2 - 1 = 0$

⑭ $x^2 - 12x + 32 = 0$

㉑ $x^2 + 3x - 28 = 0$

■ 次の方程式を解きなさい。

① $7x^2 + 8x + 1 = 0$

$$x = \frac{-4 \pm 3}{7}$$
$$= \frac{1}{7}, -1$$

② $x^2 - 7x - 8 = 0$

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

③ $x^2 - 9x - 10 = 0$

$$(x+1)(x-10) = 0$$
$$x = -1, 10$$

④ $x^2 - 7x + 10 = 0$

$$(x-2)(x-5) = 0$$
$$x = 2, 5$$

⑤ $5x^2 - 2x = 0$

$$x(5x-2) = 0$$
$$x = 0, \frac{2}{5}$$

⑥ $2x^2 + 3x - 5 = 0$

$$x = \frac{-3 \pm 7}{4}$$
$$= 1, -\frac{5}{2}$$

⑦ $16x^2 - 1 = 0$

$$(4x+1)(4x-1) = 0$$
$$x = \pm \frac{1}{4}$$

⑧ $x^2 - 13x - 30 = 0$

$$(x+2)(x-15) = 0$$
$$x = -2, 15$$

⑨ $5x^2 + 7x + 2 = 0$

$$x = \frac{-7 \pm 3}{10}$$
$$= \frac{2}{5}, -1$$

⑩ $x^2 + 8x + 3 = 0$

$$x = -4 \pm \sqrt{13}$$

⑪ $x^2 + x - 30 = 0$

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

⑫ $36x^2 - 1 = 0$

$$(6x+1)(6x-1) = 0$$
$$x = \pm \frac{1}{6}$$

⑬ $x^2 + 16x + 64 = 0$

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

⑭ $x^2 - 12x + 32 = 0$

$$(x-4)(x-8) = 0$$
$$x = 4, 8$$

⑮ $2x^2 - 3x - 2 = 0$

$$x = \frac{3 \pm 5}{4}$$
$$= 2, -\frac{1}{2}$$

⑯ $2x^2 - 3x = 0$

$$x(2x-3) = 0$$
$$x = 0, \frac{3}{2}$$

⑰ $x^2 + 3x + 2 = 0$

$$(x+1)(x+2) = 0$$
$$x = -1, -2$$

⑱ $3x^2 - 7x + 3 = 0$

$$x = \frac{7 \pm \sqrt{13}}{6}$$

⑲ $x^2 - 3x - 54 = 0$

$$(x+6)(x-9) = 0$$
$$x = -6, 9$$

⑳ $2x^2 + 2x - 3 = 0$

$$x = \frac{-1 \pm \sqrt{7}}{2}$$

㉑ $x^2 + 3x - 28 = 0$

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