2次方程式

■ 次の方程式を解きなさい。

① $x^2 + x - 9 = 0$

② $x^2 - 3x - 8 = 0$

③ $9x^2 + 4x - 1 = 0$

④ $2x^2 - 9x + 4 = 0$

⑤ $x^2 + 7x + 4 = 0$

⑥ $8x^2 + 2x - 3 = 0$

⑦ $3x^2 + 9x + 5 = 0$

⑧ $7x^2 + 2x - 1 = 0$

⑨ $2x^2 + 3x - 2 = 0$

⑩ $5x^2 - 2x - 2 = 0$

⑪ $3x^2 + 5x + 2 = 0$

⑫ $x^2 - 7x + 9 = 0$

⑬ $3x^2 - 8x + 5 = 0$

⑭ $5x^2 + 5x - 1 = 0$

⑮ $x^2 - 7x + 5 = 0$

⑯ $2x^2 - 7x - 4 = 0$

⑰ $5x^2 - 6x + 1 = 0$

⑱ $5x^2 + 2x - 3 = 0$

⑲ $x^2 - 2x - 5 = 0$

⑳ $3x^2 + 8x - 3 = 0$

㉑ $7x^2 + 4x - 3 = 0$

2次方程式

■ 次の方程式を解きなさい。

① $x^2 + x - 9 = 0$

$$x = \frac{-1 \pm \sqrt{37}}{2}$$

② $x^2 - 3x - 8 = 0$

$$x = \frac{3 \pm \sqrt{41}}{2}$$

③ $9x^2 + 4x - 1 = 0$

$$x = \frac{-2 \pm \sqrt{13}}{9}$$

④ $2x^2 - 9x + 4 = 0$

$$x = \frac{9 \pm 7}{4}$$

$$= 4, \ \frac{1}{2}$$

⑤ $x^2 + 7x + 4 = 0$

$$x = \frac{-7 \pm \sqrt{33}}{2}$$

⑥ $8x^2 + 2x - 3 = 0$

$$x = \frac{-1 \pm 5}{8}$$

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

⑦ $3x^2 + 9x + 5 = 0$

$$x = \frac{-9 \pm \sqrt{21}}{6}$$

⑧ $7x^2 + 2x - 1 = 0$

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

⑨ $2x^2 + 3x - 2 = 0$

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

$$= \frac{1}{2}, \ -2$$

⑩ $5x^2 - 2x - 2 = 0$

$$x = \frac{1 \pm \sqrt{11}}{5}$$

⑪ $3x^2 + 5x + 2 = 0$

$$x = \frac{-5 \pm 1}{6}$$

$$= \frac{2}{3}, \ -1$$

⑫ $x^2 - 7x + 9 = 0$

$$x = \frac{7 \pm \sqrt{13}}{2}$$

⑬ $3x^2 - 8x + 5 = 0$

$$x = \frac{4 \pm 1}{3}$$

$$= \frac{5}{3}, \ 1$$

⑭ $5x^2 + 5x - 1 = 0$

$$x = \frac{-5 \pm 3\sqrt{5}}{10}$$

⑮ $x^2 - 7x + 5 = 0$

$$x = \frac{7 \pm \sqrt{29}}{2}$$

⑯ $2x^2 - 7x - 4 = 0$

$$x = \frac{7 \pm 9}{4}$$

$$= 4, \ -\frac{1}{2}$$

⑰ $5x^2 - 6x + 1 = 0$

$$x = \frac{3 \pm 2}{5}$$

$$= 1, \ \frac{1}{5}$$

⑱ $5x^2 + 2x - 3 = 0$

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

$$= \frac{3}{5}, \ -1$$

⑲ $x^2 - 2x - 5 = 0$

$$x = 1 \pm \sqrt{6}$$

⑳ $3x^2 + 8x - 3 = 0$

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

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

㉑ $7x^2 + 4x - 3 = 0$

$$x = \frac{-2 \pm 5}{7}$$

$$= \frac{3}{7}, \ -1$$