

■ 次の2次方程式を解きなさい。

(1) $x^2 + 5x + 2 = 0$

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

(3) $x^2 + 7x - 3 = 0$

(4) $2x^2 + 7x + 2 = 0$

(5) $2x^2 + 6x - 3 = 0$

(6) $2x^2 - 2x - 5 = 0$

(7) $3x^2 + 4x - 1 = 0$

(8) $3x^2 - x - 3 = 0$

(9) $4x^2 + 9x - 2 = 0$

(10) $5x^2 + x - 1 = 0$

■ 次の2次方程式を解きなさい。

$$(1) x^2 + 5x + 2 = 0$$

$$x = \frac{-5 \pm \sqrt{25 - 8}}{2}$$
$$= \frac{-5 \pm \sqrt{17}}{2}$$

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

$$x = \frac{3 \pm \sqrt{9 + 12}}{2}$$
$$= \frac{3 \pm \sqrt{21}}{2}$$

$$(3) x^2 + 7x - 3 = 0$$

$$x = \frac{-7 \pm \sqrt{49 + 12}}{2}$$
$$= \frac{-7 \pm \sqrt{61}}{2}$$

$$(4) 2x^2 + 7x + 2 = 0$$

$$x = \frac{-7 \pm \sqrt{49 - 16}}{4}$$
$$= \frac{-7 \pm \sqrt{33}}{4}$$

$$(5) 2x^2 + 6x - 3 = 0$$

$$x = \frac{-6 \pm \sqrt{36 + 24}}{4}$$
$$= \frac{-6 \pm 2\sqrt{15}}{4}$$
$$= \frac{-3 \pm \sqrt{15}}{2}$$

$$(6) 2x^2 - 2x - 5 = 0$$

$$x = \frac{2 \pm \sqrt{4 + 40}}{4}$$
$$= \frac{2 \pm 2\sqrt{11}}{4}$$
$$= \frac{1 \pm \sqrt{11}}{2}$$

$$(7) 3x^2 + 4x - 1 = 0$$

$$x = \frac{-4 \pm \sqrt{16 + 12}}{6}$$
$$= \frac{-4 \pm 2\sqrt{7}}{6}$$
$$= \frac{-2 \pm \sqrt{7}}{3}$$

$$(8) 3x^2 - x - 3 = 0$$

$$x = \frac{1 \pm \sqrt{1 + 36}}{6}$$
$$= \frac{1 \pm \sqrt{37}}{6}$$

$$(9) 4x^2 + 9x - 2 = 0$$

$$x = \frac{-9 \pm \sqrt{81 + 32}}{8}$$
$$= \frac{-9 \pm \sqrt{113}}{8}$$

$$(10) 5x^2 + x - 1 = 0$$

$$x = \frac{-1 \pm \sqrt{1 + 20}}{10}$$
$$= \frac{-1 \pm \sqrt{21}}{10}$$