

<第30回 解答と解説>

- 1 (1) $x = -7, 9$ (2) $x = \frac{1}{2}, 2$
(3) $x = 5, 8$ (4) $x = -3, 10$
(5) $x = -12, 2$ (6) $x = \frac{1}{3}$

解説

- (1) $x + 7 = 0$ のとき, $x = -7$
 $x - 9 = 0$ のとき, $x = 9$

- 2 (1) $x = \pm\sqrt{5}$ (2) $x = \pm\frac{2\sqrt{3}}{3}$
(3) $x = 4, 12$ (4) $x = -3 \pm 3\sqrt{3}$
(5) $x = -2 \pm \sqrt{10}$ (6) $x = -5 \pm 5\sqrt{2}$
(7) $x = 6 \pm 2\sqrt{6}$ (8) $x = 2 \pm \sqrt{7}$

解説

- (1) $2x^2 = 10, x^2 = 5, x = \pm\sqrt{5}$
(2) $x^2 = \frac{4}{3}, x = \pm\sqrt{\frac{4}{3}} = \pm\frac{2}{\sqrt{3}} = \pm\frac{2\sqrt{3}}{3}$
(3) $x - 8 = \pm 4, x = 8 \pm 4 = 4, 12$

- 3 (1) $x = 2, 9$ (2) $x = -\frac{2}{3}, 0$
(3) $x = 2 \pm 2\sqrt{2}$ (4) $x = \pm\frac{\sqrt{14}}{4}$

解説

- (1) $x^2 - 11x + 30 = 12, x^2 - 11x + 18 = 0$
 $(x - 2)(x - 9) = 0, x = 2, 9$