

1次方程式の解き方③解答と解説

1 解答 (1) $x = -3$ (2) $x = -6$ (3) $x = -1$ (4) $x = 4$

(1) $2(x+4) = -x-1$

かっこをはずすと

$$2x+8 = -x-1$$

$$2x+x = -1-8$$

$$3x = -9$$

$$x = -3$$

(2) $8x+3 = 3(2x-3)$

かっこをはずすと

$$8x+3 = 6x-9$$

$$8x-6x = -9-3$$

$$2x = -12$$

$$x = -6$$

(3) $-4(x+2) = 2x-2$

かっこをはずすと

$$-4x-8 = 2x-2$$

$$-4x-2x = -2+8$$

$$-6x = 6$$

$$x = -1$$

(4) $-7x-7 = -5(3x-5)$

かっこをはずすと

$$-7x-7 = -15x+25$$

$$-7x+15x = 25+7$$

$$8x = 32$$

$$x = 4$$

2 解答 (1) $x = 3$ (2) $x = -2$ (3) $x = -5$ (4) $x = -2$ (5) $x = -10$

(6) $x = 10$

(1) $3(2x+3) = 2x+21$

$$6x+9 = 2x+21$$

$$6x-2x = 21-9$$

$$4x = 12$$

$$x = 3$$

(2) $4x+20 = -2(4x+2)$

$$4x+20 = -8x-4$$

$$4x+8x = -4-20$$

$$12x = -24$$

$$x = -2$$

(3) $-8x+3(x-2) = 19$

$$-8x+3x-6 = 19$$

$$-8x+3x = 19+6$$

$$-5x = 25$$

$$x = -5$$

(4) $3-7(2x+3) = -5x$

$$3-14x-21 = -5x$$

$$-14x-18 = -5x$$

$$-14x+5x = 18$$

$$-9x = 18$$

$$x = -2$$

(5) $5(4-x) = -2(4x+5)$

$$20-5x = -8x-10$$

$$-5x+8x = -10-20$$

$$3x = -30$$

$$x = -10$$

(6) $-7(2x-3)+4(3x-1) = -3$

$$-14x+21+12x-4 = -3$$

$$-2x+17 = -3$$

$$-2x = -3-17$$

$$-2x = -20$$

$$x = 10$$