

# 方程式すべて O1

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 6x + 5 &= 3x + 17 \\ 6x - 3x &= 17 - 5 \\ 3x &= 12 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad x + 11 &= 7x + 29 \\ x - 7x &= 29 - 11 \\ -6x &= 18 \\ x &= -3 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 49 &= 0 \\ (x + 7)(x - 7) &= 0 \\ x &= \pm 7 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 + 7x + 12 &= 0 \\ (x + 3)(x + 4) &= 0 \\ x &= -3, -4 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + 2x + 1 &= 0 \\ (x + 1)^2 &= 0 \\ x &= -1 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x + y = 9 \\ x + 2y = 8 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 2 \\ 6x + 2y &= 18 \cdots \textcircled{1}' \end{aligned}$$

$$\begin{aligned} \textcircled{1}' - \textcircled{2} \\ 5x &= 10 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} x = 2 \text{ を } \textcircled{1} \text{ に代入} \\ 3 \times 2 + y &= 9 \\ 6 + y &= 9 \\ y &= 9 - 6 \\ y &= 3 \end{aligned}$$

$$(x, y) = (2, 3)$$

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# 方程式すべて O2

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 8x + 13 &= 5x + 4 \\ 8x - 5x &= 4 - 13 \\ 3x &= -9 \\ x &= -3 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 2x - 7 &= 8x - 19 \\ 2x - 8x &= -19 + 7 \\ -6x &= -12 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 + 6x + 9 &= 0 \\ (x + 3)^2 &= 0 \\ x &= -3 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 + 8x &= 0 \\ x(x + 8) &= 0 \\ x &= 0, -8 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + 3x - 54 &= 0 \\ (x + 9)(x - 6) &= 0 \\ x &= -9, 6 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 2x - y = 11 \\ 3x + 2y = 6 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 2 \\ 4x - 2y &= 22 \cdots \textcircled{1}' \end{aligned}$$

$$\begin{aligned} \textcircled{1}' + \textcircled{2} \\ 7x &= 28 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} x = 4 \text{ を } \textcircled{1} \text{ に代入} \\ 2 \times 4 - y &= 11 \\ 8 - y &= 11 \\ -y &= 11 - 8 \\ -y &= 3 \\ y &= -3 \end{aligned}$$

$$(x, y) = (4, -3)$$

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# 方程式すべて 03

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 6x - 2 &= 3x + 13 \\ 6x - 3x &= 13 + 2 \\ 3x &= 15 \\ x &= 5 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 3x - 3 &= 5x + 9 \\ 3x - 5x &= 9 + 3 \\ -2x &= 12 \\ x &= -6 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 16 &= 0 \\ (x+4)(x-4) &= 0 \\ x &= \pm 4 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 - 7x + 10 &= 0 \\ (x-2)(x-5) &= 0 \\ x &= 2, 5 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + 16x + 64 &= 0 \\ (x+8)^2 &= 0 \\ x &= -8 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x + y = 10 \\ 2x + 3y = 9 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 3 \\ 9x + 3y &= 30 \cdots \textcircled{1}' \\ \textcircled{1}' - \textcircled{2} \\ 7x &= 21 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} x = 3 \text{ を } \textcircled{1} \text{ に代入} \\ 3 \times 3 + y &= 10 \\ 9 + y &= 10 \\ y &= 10 - 9 \\ y &= 1 \end{aligned}$$

$$(x, y) = (3, 1)$$

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# 方程式すべて 04

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 5x - 1 &= 3x + 5 \\ 5x - 3x &= 5 + 1 \\ 2x &= 6 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 2x - 7 &= 6x + 25 \\ 2x - 6x &= 25 + 7 \\ -4x &= 32 \\ x &= -8 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 8x + 16 &= 0 \\ (x-4)^2 &= 0 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 - 9x &= 0 \\ x(x-9) &= 0 \\ x &= 0, 9 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 - 2x - 24 &= 0 \\ (x+4)(x-6) &= 0 \\ x &= -4, 6 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x - 2y = 8 \\ 5x + y = 9 \end{cases}$$

$$\begin{aligned} \textcircled{2} \times 2 \\ 10x + 2y &= 18 \cdots \textcircled{2}' \\ \textcircled{1} + \textcircled{2}' \\ 13x &= 26 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} x = 4 \text{ を } \textcircled{2} \text{ に代入} \\ 5 \times 2 + y &= 9 \\ 10 + y &= 9 \\ y &= 9 - 10 \\ y &= -1 \end{aligned}$$

$$(x, y) = (2, -1)$$

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# 方程式すべて 05

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\textcircled{1} \quad 8x + 11 = 2x + 35$$

$$8x - 2x = 35 - 11$$

$$6x = 24$$

$$x = 4$$

$$\textcircled{2} \quad 3x + 5 = 5x + 15$$

$$3x - 5x = 15 - 5$$

$$-2x = 10$$

$$x = -5$$

$$\textcircled{3} \quad x^2 - 36 = 0$$

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

$$x = \pm 6$$

$$\textcircled{4} \quad x^2 + 8x + 7 = 0$$

$$(x+7)(x+1) = 0$$

$$x = -7, -1$$

$$\textcircled{5} \quad x^2 - 18x + 81 = 0$$

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

$$x = 9$$

$$\textcircled{6} \quad \begin{cases} 2x + 3y = 9 \\ 3x - y = 8 \end{cases}$$

$$\textcircled{2} \times 3$$

$$9x - 3y = 24 \cdots \textcircled{2}'$$

$$\textcircled{1} + \textcircled{2}'$$

$$11x = 33$$

$$x = 3$$

$x = 3$ を(2)に代入

$$3 \times 3 - y = 8$$

$$9 - y = 8$$

$$-y = 8 - 9$$

$$-y = -1$$

$$y = 1$$

$$(x, y) = (3, 1)$$

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# 方程式すべて 06

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\textcircled{1} \quad 10x + 9 = 2x + 33$$

$$10x - 2x = 33 - 9$$

$$2x = 24$$

$$x = 12$$

$$\textcircled{6} \quad \begin{cases} x - 2y = 7 \\ 3x - y = 11 \end{cases}$$

$$\textcircled{2} \times 2$$

$$6x - 2y = 22 \cdots \textcircled{2}'$$

$$\textcircled{1} - \textcircled{2}'$$

$$-5x = -15$$

$$x = 3$$

$x = 3$ を(2)に代入

$$3 \times 3 - y = 11$$

$$9 - y = 11$$

$$-y = 11 - 9$$

$$-y = 2$$

$$y = -2$$

$$\textcircled{3} \quad x^2 + 4x + 4 = 0$$

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

$$x = -2$$

$$\textcircled{4} \quad x^2 + 3x = 0$$

$$x(x+3) = 0$$

$$x = 0, -3$$

$$\textcircled{5} \quad x^2 + 5x - 24 = 0$$

$$(x+8)(x-3) = 0$$

$$x = -8, 3$$

$$(x, y) = (3, -2)$$

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# 方程式すべて 07

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 5x - 6 &= x + 10 \\ 5x - x &= 10 + 6 \\ 4x &= 16 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 2x - 2 &= 5x - 11 \\ 2x - 5x &= -11 + 2 \\ -3x &= -9 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 100 &= 0 \\ (x+10)(x-10) &= 0 \\ x &= \pm 10 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 - 9x + 20 &= 0 \\ (x-4)(x-5) &= 0 \\ x &= 4, 5 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + 14x + 49 &= 0 \\ (x+7)^2 &= 0 \\ x &= -7 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x + 2y = 7 \\ 2x - y = 7 \end{cases}$$

$$\begin{aligned} \textcircled{2} \times 2 & \\ 4x - 2y &= 14 \cdots \textcircled{2}' \\ \textcircled{1} + \textcircled{2}' & \\ 7x &= 21 \\ x &= 3 \\ x=3 \text{を } \textcircled{2} \text{ に代入} & \\ 2 \times 3 - y &= 7 \\ 6 - y &= 7 \\ -y &= 7 - 6 \\ -y &= 1 \\ y &= -1 \\ (x, y) &= (3, -1) \end{aligned}$$

# 方程式すべて 08

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 5x - 8 &= 2x - 2 \\ 5x - 2x &= -2 + 8 \\ 3x &= 6 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 3x - 11 &= 7x + 13 \\ 3x - 7x &= 13 + 11 \\ -4x &= 24 \\ x &= -6 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 12x + 36 &= 0 \\ (x-6)^2 &= 0 \\ x &= 6 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 - 5x &= 0 \\ x(x-5) &= 0 \\ x &= 0, 5 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 - 2x - 35 &= 0 \\ (x+5)(x-7) &= 0 \\ x &= -5, 7 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 2x + y = 5 \\ 3x + 2y = 6 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 2 & \\ 4x + 2y &= 10 \cdots \textcircled{1}' \\ \textcircled{1}' - \textcircled{2} & \\ x &= 4 \\ x=4 \text{を } \textcircled{1} \text{ に代入} & \\ 2 \times 4 + y &= 5 \\ 8 + y &= 5 \\ y &= 5 - 8 \\ y &= -3 \\ (x, y) &= (4, -3) \end{aligned}$$

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# 方程式すべて 09

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\textcircled{1} \quad 7x + 8 = 2x + 33$$

$$7x - 2x = 33 - 8$$

$$5x = 25$$

$$x = 5$$

$$\textcircled{2} \quad 3x + 17 = 5x + 5$$

$$3x - 5x = 5 - 17$$

$$-2x = -12$$

$$x = 6$$

$$\textcircled{3} \quad x^2 - 64 = 0$$

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

$$x = \pm 8$$

$$\textcircled{4} \quad x^2 + 9x + 18 = 0$$

$$(x+3)(x+6) = 0$$

$$x = -3, -6$$

$$\textcircled{5} \quad x^2 - 6x + 9 = 0$$

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

$$x = 3$$

$$\textcircled{6} \quad \begin{cases} 2x + 3y = 7 \\ 5x + y = -2 \end{cases}$$

$$\textcircled{2} \times 3$$

$$15x + 3y = -6 \cdots \textcircled{2}'$$

$$\textcircled{1} - \textcircled{2}'$$

$$-13x = 13$$

$$x = -1$$

$x = -1$  を  $\textcircled{2}$  に代入

$$5 \times (-1) + y = -2$$

$$-5 + y = -2$$

$$y = -2 + 5$$

$$y = 3$$

$$(x, y) = (-1, 3)$$

# 方程式すべて 10

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\textcircled{1} \quad 7x + 5 = 4x + 20$$

$$7x - 4x = 20 - 5$$

$$3x = 15$$

$$x = 5$$

$$\textcircled{6} \quad \begin{cases} x + y = 7 \\ 2x - 3y = 4 \end{cases}$$

$$\textcircled{1} \times 3$$

$$3x + 3y = 21 \cdots \textcircled{1}'$$

$$\textcircled{1}' + \textcircled{2}$$

$$5x = 25$$

$$x = 5$$

$x = 5$  を  $\textcircled{1}$  に代入

$$5 + y = 7$$

$$y = 7 - 5$$

$$y = 2$$

$$(x, y) = (5, 2)$$

$$\textcircled{3} \quad x^2 + 10x + 25 = 0$$

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

$$x = -5$$

$$\textcircled{4} \quad x^2 + x = 0$$

$$x(x+1) = 0$$

$$x = 0, -1$$

$$\textcircled{5} \quad x^2 + x - 30 = 0$$

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

$$x = -6, 5$$

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# 方程式すべて 11

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 5x + 7 &= x - 5 \\ 5x - x &= -5 - 7 \\ -4x &= -12 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 2x + 7 &= 5x + 28 \\ 2x - 5x &= 28 - 7 \\ -3x &= 21 \\ x &= -7 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 9 &= 0 \\ (x+3)(x-3) &= 0 \\ x &= \pm 3 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 - 8x + 15 &= 0 \\ (x-3)(x-5) &= 0 \\ x &= 3, 5 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + 16x + 64 &= 0 \\ (x+8)^2 &= 0 \\ x &= -8 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x + y = 3 \\ x - 2y = 8 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 2 \\ 6x + 2y &= 6 \cdots \textcircled{1}' \\ \textcircled{1}' + \textcircled{2} \\ 7x &= 14 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} x = 2 \text{ を } \textcircled{1} \text{ に代入} \\ 3 \times 2 + y &= 3 \\ 6 + y &= 3 \\ y &= 3 - 6 \\ y &= -3 \end{aligned}$$

$$(x, y) = (2, -3)$$

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# 方程式すべて 12

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 7x - 11 &= 2x + 4 \\ 7x - 2x &= 4 + 11 \\ 5x &= 15 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 3x + 7 &= 8x + 22 \\ 3x - 8x &= 22 - 7 \\ -5x &= 15 \\ x &= -3 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 8x + 16 &= 0 \\ (x-4)^2 &= 0 \\ x &= 4 \end{aligned}$$

$$\textcircled{4} \quad x^2 - 4x = 0$$

$$\begin{aligned} x(x-4) &= 0 \\ x &= 0, 4 \end{aligned}$$

$$\textcircled{5} \quad x^2 - 4x - 32 = 0$$

$$\begin{aligned} (x+4)(x-8) &= 0 \\ x &= -4, 8 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 2x - y = 7 \\ 3x - 2y = 9 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 2 \\ 4x - 2y &= 14 \cdots \textcircled{1}' \\ \textcircled{1}' - \textcircled{2} \\ x &= 5 \\ x = 5 \text{ を } \textcircled{1} \text{ に代入} \\ 2 \times 5 - y &= 7 \\ 10 - y &= 7 \\ -y &= 7 - 10 \\ -y &= -3 \\ y &= 3 \end{aligned}$$

$$(x, y) = (5, 3)$$

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# 方程式すべて 13

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 5x + 7 &= 2x + 28 \\ 5x - 2x &= 28 - 7 \\ 3x &= 21 \\ x &= 7 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 3x + 5 &= 5x + 23 \\ 3x - 5x &= 23 - 5 \\ -2x &= 18 \\ x &= -9 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 64 &= 0 \\ (x+8)(x-8) &= 0 \\ x &= \pm 8 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 + 6x + 8 &= 0 \\ (x+2)(x+4) &= 0 \\ x &= -2, -4 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 - 10x + 25 &= 0 \\ (x-5)^2 &= 0 \\ x &= 5 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x + y = 7 \\ 2x + 3y = 7 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 3 \\ 9x + 3y &= 21 \cdots \textcircled{1}' \end{aligned}$$

$$\begin{aligned} \textcircled{1}' - \textcircled{2} \\ 7x &= 14 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} x = 2 \text{ を } \textcircled{1} \text{ に代入} \\ 3 \times 2 + y &= 7 \\ 6 + y &= 7 \\ y &= 7 - 6 \\ y &= 1 \end{aligned}$$

$$(x, y) = (2, 1)$$

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# 方程式すべて 14

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 9x + 5 &= 5x + 17 \\ 9x - 5x &= 17 - 5 \\ 4x &= 12 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad x - 7 &= 6x + 23 \\ x - 6x &= 23 + 7 \\ -5x &= 30 \\ x &= -6 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 + 6x + 9 &= 0 \\ (x+3)^2 &= 0 \\ x &= -3 \end{aligned}$$

$$\textcircled{4} \quad x^2 + 5x = 0$$

$$\begin{aligned} x(x+5) &= 0 \\ x &= 0, -5 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + 3x - 18 &= 0 \\ (x+3)(x-6) &= 0 \\ x &= -3, 6 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x - 2y = 11 \\ 5x + y = 14 \end{cases}$$

$$\begin{aligned} \textcircled{2} \times 2 \\ 10x + 2y &= 28 \cdots \textcircled{2}' \end{aligned}$$

$$\begin{aligned} \textcircled{1} + \textcircled{2}' \\ 13x &= 39 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} x = 3 \text{ を } \textcircled{2} \text{ に代入} \\ 5 \times 3 + y &= 14 \\ 15 + y &= 14 \\ y &= 14 - 15 \\ y &= -1 \end{aligned}$$

$$(x, y) = (3, -1)$$

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# 方程式すべて 15

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 6x - 5 &= 2x + 11 \\ 6x - 2x &= 11 + 5 \\ 4x &= 16 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 2x - 2 &= 5x - 11 \\ 2x - 5x &= -11 + 2 \\ -3x &= -9 \\ x &= 3 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 81 &= 0 \\ (x+9)(x-9) &= 0 \\ x &= \pm 9 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 - 9x + 18 &= 0 \\ (x-2)(x-9) &= 0 \\ x &= 2, 9 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 + 2x + 1 &= 0 \\ (x+1)^2 &= 0 \\ x &= -1 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 2x+y = 9 \\ x+3y = 2 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 3 \\ 6x+3y &= 27 \cdots \textcircled{1}' \\ \textcircled{1}' - \textcircled{2} \\ 5x &= 25 \\ x &= 5 \end{aligned}$$

$$\begin{aligned} x=5 \text{ を } \textcircled{1} \text{ に代入} \\ 2 \times 5 + y &= 9 \\ 10 + y &= 9 \\ y &= 9 - 10 \\ y &= -1 \end{aligned}$$

$$(x, y) = (5, -1)$$

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# 方程式すべて 16

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 5x + 9 &= 3x - 1 \\ 5x - 3x &= -1 - 9 \\ 2x &= -10 \\ x &= -5 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 3x - 13 &= 7x + 3 \\ 3x - 7x &= 3 + 13 \\ -4x &= 16 \\ x &= -4 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2 - 18x + 81 &= 0 \\ (x-9)^2 &= 0 \\ x &= 9 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2 - 7x &= 0 \\ x(x-7) &= 0 \\ x &= 0, 7 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2 - 3x - 28 &= 0 \\ (x+4)(x-7) &= 0 \\ x &= -4, 7 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x+2y = 1 \\ 2x-y = 3 \end{cases}$$

$$\begin{aligned} \textcircled{2} \times 2 \\ 4x-2y &= 6 \cdots \textcircled{2}' \\ \textcircled{1} + \textcircled{2}' \\ 7x &= 7 \\ x &= 1 \end{aligned}$$

$$\begin{aligned} x=1 \text{ を } \textcircled{2} \text{ に代入} \\ 2 \times 1 - y &= 3 \\ 2 - y &= 3 \\ -y &= 3 - 2 \\ -y &= 1 \\ y &= -1 \end{aligned}$$

$$(x, y) = (1, -1)$$

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# 方程式すべて 17

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 9x+6 &= 2x+20 \\ 9x-2x &= 20-6 \\ 7x &= 14 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad 3x+7 &= 5x-5 \\ 3x-5x &= -5-7 \\ -2x &= -12 \\ x &= 6 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2-49 &= 0 \\ (x+7)(x-7) &= 0 \\ x &= \pm 7 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2+8x+15 &= 0 \\ (x+3)(x+5) &= 0 \\ x &= -3, -5 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2-14x+49 &= 0 \\ (x-7)^2 &= 0 \\ x &= 7 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x+y = 5 \\ 2x+3y = 1 \end{cases}$$

$$\begin{aligned} \textcircled{1} \times 3 & \quad 9x+3y = 15 \cdots \textcircled{1}' \\ \textcircled{1}' - \textcircled{2} & \quad 7x = 14 \\ & \quad x = 2 \\ x = 2 \text{ を } \textcircled{1} \text{ に代入} & \\ 3 \times 2 + y & = 5 \\ 6 + y & = 5 \\ y & = 5 - 6 \\ y & = -1 \end{aligned}$$

$$(x, y) = (2, -1)$$

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# 方程式すべて 18

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\begin{aligned} \textcircled{1} \quad 7x+5 &= 3x+21 \\ 7x-3x &= 21-5 \\ 4x &= 16 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad x-4 &= 4x+14 \\ x-4x &= 14+4 \\ -3x &= 18 \\ x &= -6 \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad x^2+2x+1 &= 0 \\ (x+1)^2 &= 0 \\ x &= -1 \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad x^2+7x &= 0 \\ x(x+7) &= 0 \\ x &= 0, -7 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad x^2+4x-21 &= 0 \\ (x+7)(x-3) &= 0 \\ x &= -7, 3 \end{aligned}$$

$$\textcircled{6} \quad \begin{cases} 3x-2y = 7 \\ 5x+y = 3 \end{cases}$$

$$\begin{aligned} \textcircled{2} \times 2 & \quad 10x+2y = 6 \cdots \textcircled{2}' \\ \textcircled{1} + \textcircled{2}' & \quad 13x = 13 \\ & \quad x = 1 \\ x = 1 \text{ を } \textcircled{2} \text{ に代入} & \\ 5 \times 1 + y & = 3 \\ 5 + y & = 3 \\ -y & = 3 - 5 \\ y & = -2 \end{aligned}$$

$$(x, y) = (1, -2)$$

< 年 月 日 >

# 方程式すべて 19

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\textcircled{1} \quad 10x - 11 = 4x + 13$$

$$10x - 4x = 13 + 11$$

$$6x = 24$$

$$x = 4$$

$$\textcircled{2} \quad 2x + 5 = 5x + 20$$

$$2x - 5x = 20 - 5$$

$$-3x = 15$$

$$x = -5$$

$$\textcircled{3} \quad x^2 - 16 = 0$$

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

$$x = \pm 4$$

$$\textcircled{4} \quad x^2 - 7x + 12 = 0$$

$$(x-3)(x-4) = 0$$

$$x = 3, 4$$

$$\textcircled{5} \quad x^2 + 10x + 25 = 0$$

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

$$x = -5$$

$$\textcircled{6} \quad \begin{cases} 2x + y = 5 \\ 3x + 2y = 9 \end{cases}$$

$$\textcircled{1} \times 2$$

$$4x + 2y = 10 \cdots \textcircled{1}'$$

$$\textcircled{1}' - \textcircled{2}$$

$$x = 1$$

$x = 1$  を  $\textcircled{1}$  に代入

$$2 \times 1 + y = 5$$

$$2 + y = 5$$

$$y = 5 - 2$$

$$y = 3$$

$$(x, y) = (1, 3)$$

# 方程式すべて 20

年 組 番・氏名

◆次の一次方程式、二次方程式、連立方程式を解け。

$$\textcircled{1} \quad 5x - 5 = 2x + 13$$

$$5x - 2x = 13 + 5$$

$$3x = 18$$

$$x = 6$$

$$\textcircled{6} \quad \begin{cases} 3x + 2y = 4 \\ 2x - y = 5 \end{cases}$$

$$\textcircled{2} \times 2$$

$$4x - 2y = 10 \cdots \textcircled{2}'$$

$$\textcircled{1} + \textcircled{2}'$$

$$7x = 14$$

$$x = 2$$

$x = 2$  を  $\textcircled{2}$  に代入

$$2 \times 2 - y = 5$$

$$4 - y = 5$$

$$-y = 5 - 4$$

$$-y = 1$$

$$y = -1$$

$$\textcircled{3} \quad x^2 - 6x + 9 = 0$$

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

$$x = 3$$

$$\textcircled{4} \quad x^2 - 3x = 0$$

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

$$x = 0, 3$$

$$\textcircled{5} \quad x^2 - 4x - 21 = 0$$

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

$$x = -3, 7$$

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< 年 月 日 >