

1次方程式

年 組 名前

/14

■ 次の方程式を解きなさい。

① $\frac{1}{6}x + 2 = \frac{5}{6} - \frac{2}{3}x$

② $-\frac{5}{7}x + \frac{5}{7} = -\frac{1}{2} - \frac{3}{7}x$

③ $-\frac{5}{8}a - 2 = \frac{1}{2} + 2a$

④ $-\frac{1}{8}x + \frac{3}{8} = 2 - \frac{3}{4}x$

⑤ $-\frac{5}{6}x + \frac{3}{4} = -\frac{1}{2} + \frac{1}{2}x$

⑥ $\frac{1}{2}x + \frac{2}{3} = -\frac{1}{2} - \frac{1}{2}x$

⑦ $-\frac{3}{7}x + \frac{4}{7} = \frac{2}{7} + 2x$

⑧ $\frac{1}{4}y - \frac{2}{3} = -\frac{3}{4} - \frac{1}{4}y$

⑨ $\frac{1}{2}t - \frac{1}{2} = \frac{5}{9} - \frac{1}{9}t$

⑩ $-\frac{8}{9} + \frac{7}{18}x = -\frac{1}{9} - \frac{1}{9}x$

⑪ $-\frac{1}{6} - \frac{5}{18}b = -\frac{1}{2} + \frac{1}{2}b$

⑫ $\frac{1}{2}x + \frac{1}{6} = \frac{7}{12} + \frac{1}{6}x$

⑬ $\frac{1}{2}n + \frac{2}{3} = -2 - \frac{5}{6}n$

⑭ $-\frac{1}{6}y - \frac{8}{9} = \frac{1}{6} - \frac{1}{3}y$

■ 次の方程式を解きなさい。

$$\textcircled{1} \quad \frac{1}{6}x + 2 = \frac{5}{6} - \frac{2}{3}x$$

両辺に 6 をかけて

$$x + 12 = 5 - 4x$$

$$5x = -7$$

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

$$\textcircled{2} \quad -\frac{5}{7}x + \frac{5}{7} = -\frac{1}{2} - \frac{3}{7}x$$

両辺に 14 をかけて

$$-10x + 10 = -7 - 6x$$

$$-4x = -17$$

$$x = \frac{17}{4}$$

$$\textcircled{3} \quad -\frac{5}{8}a - 2 = \frac{1}{2} + 2a$$

両辺に 8 をかけて

$$-5a - 16 = 4 + 16a$$

$$-21a = 20$$

$$a = -\frac{20}{21}$$

$$\textcircled{4} \quad -\frac{1}{8}x + \frac{3}{8} = 2 - \frac{3}{4}x$$

両辺に 8 をかけて

$$-x + 3 = 16 - 6x$$

$$5x = 13$$

$$x = \frac{13}{5}$$

$$\textcircled{5} \quad -\frac{5}{6}x + \frac{3}{4} = -\frac{1}{2} + \frac{1}{2}x$$

両辺に 12 をかけて

$$-10x + 9 = -6 + 6x$$

$$-16x = -15$$

$$x = \frac{15}{16}$$

$$\textcircled{6} \quad \frac{1}{2}x + \frac{2}{3} = -\frac{1}{2} - \frac{1}{2}x$$

両辺に 6 をかけて

$$3x + 4 = -3 - 3x$$

$$6x = -7$$

$$x = -\frac{7}{6}$$

$$\textcircled{7} \quad -\frac{3}{7}x + \frac{4}{7} = \frac{2}{7} + 2x$$

両辺に 7 をかけて

$$-3x + 4 = 2 + 14x$$

$$-17x = -2$$

$$x = \frac{2}{17}$$

$$\textcircled{8} \quad \frac{1}{4}y - \frac{2}{3} = -\frac{3}{4} - \frac{1}{4}y$$

両辺に 12 をかけて

$$3y - 8 = -9 - 3y$$

$$6y = -1$$

$$y = -\frac{1}{6}$$

$$\textcircled{9} \quad \frac{1}{2}t - \frac{1}{2} = \frac{5}{9} - \frac{1}{9}t$$

両辺に 18 をかけて

$$9t - 9 = 10 - 2t$$

$$11t = 19$$

$$t = \frac{19}{11}$$

$$\textcircled{10} \quad -\frac{8}{9} + \frac{7}{18}x = -\frac{1}{9} - \frac{1}{9}x$$

両辺に 18 をかけて

$$-16 + 7x = -2 - 2x$$

$$9x = 14$$

$$x = \frac{14}{9}$$

$$\textcircled{11} \quad -\frac{1}{6} - \frac{5}{18}b = -\frac{1}{2} + \frac{1}{2}b$$

両辺に 18 をかけて

$$-3 - 5b = -9 + 9b$$

$$-14b = -6$$

$$b = \frac{3}{7}$$

$$\textcircled{12} \quad \frac{1}{2}x + \frac{1}{6} = \frac{7}{12} + \frac{1}{6}x$$

両辺に 12 をかけて

$$6x + 2 = 7 + 2x$$

$$4x = 5$$

$$x = \frac{5}{4}$$

$$\textcircled{13} \quad \frac{1}{2}n + \frac{2}{3} = -2 - \frac{5}{6}n$$

両辺に 6 をかけて

$$3n + 4 = -12 - 5n$$

$$8n = -16$$

$$n = -2$$

$$\textcircled{14} \quad -\frac{1}{6}y - \frac{8}{9} = \frac{1}{6} - \frac{1}{3}y$$

両辺に 18 をかけて

$$-3y - 16 = 3 - 6y$$

$$3y = 19$$

$$y = \frac{19}{3}$$