

1次方程式

年 組 名前

/14

■ 次の方程式を解きなさい。

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

② $\frac{2}{3}x - \frac{4}{15} = -\frac{2}{15} - \frac{2}{3}x$

③ $\frac{1}{2}m + \frac{1}{12} = \frac{5}{12} + \frac{1}{4}m$

④ $-\frac{5}{6}x - \frac{5}{6} = -\frac{1}{18} + \frac{5}{6}x$

⑤ $\frac{1}{2}y - \frac{1}{2} = -2 - \frac{1}{2}y$

⑥ $-\frac{7}{12}y + \frac{1}{12} = -\frac{5}{6} - \frac{3}{4}y$

⑦ $\frac{4}{9}x - \frac{1}{6} = \frac{1}{6} + \frac{1}{3}x$

⑧ $\frac{1}{2}x + \frac{5}{7} = -\frac{2}{7} - \frac{5}{14}x$

⑨ $\frac{2}{3}x + \frac{1}{2} = -\frac{7}{12} + \frac{5}{12}x$

⑩ $-\frac{5}{6} + \frac{1}{6}x = \frac{1}{4} - \frac{5}{6}x$

⑪ $-\frac{1}{3} - \frac{1}{3}x = \frac{7}{18} - \frac{1}{6}x$

⑫ $-\frac{7}{9}x - \frac{1}{2} = \frac{5}{6} + \frac{1}{2}x$

⑬ $\frac{3}{8}b + \frac{3}{4} = \frac{3}{16} - \frac{1}{4}b$

⑭ $-\frac{5}{12}x + \frac{2}{3} = -\frac{1}{3} + \frac{3}{4}x$

■ 次の方程式を解きなさい。

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

両辺に 12 をかけて

$$-6x + 9 = 2 + 6x$$

$$-12x = -7$$

$$x = \frac{7}{12}$$

$$\textcircled{2} \quad \frac{2}{3}x - \frac{4}{15} = -\frac{2}{15} - \frac{2}{3}x$$

両辺に 15 をかけて

$$10x - 4 = -2 - 10x$$

$$20x = 2$$

$$x = \frac{1}{10}$$

$$\textcircled{3} \quad \frac{1}{2}m + \frac{1}{12} = \frac{5}{12} + \frac{1}{4}m$$

両辺に 12 をかけて

$$6m + 1 = 5 + 3m$$

$$3m = 4$$

$$m = \frac{4}{3}$$

$$\textcircled{4} \quad -\frac{5}{6}x - \frac{5}{6} = -\frac{1}{18} + \frac{5}{6}x$$

両辺に 18 をかけて

$$-15x - 15 = -1 + 15x$$

$$-30x = 14$$

$$x = -\frac{7}{15}$$

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

両辺に 2 をかけて

$$y - 1 = -4 - y$$

$$2y = -3$$

$$y = -\frac{3}{2}$$

$$\textcircled{6} \quad -\frac{7}{12}y + \frac{1}{12} = -\frac{5}{6} - \frac{3}{4}y$$

両辺に 12 をかけて

$$-7y + 1 = -10 - 9y$$

$$2y = -11$$

$$y = -\frac{11}{2}$$

$$\textcircled{7} \quad \frac{4}{9}x - \frac{1}{6} = \frac{1}{6} + \frac{1}{3}x$$

両辺に 18 をかけて

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

$$2x = 6$$

$$x = 3$$

$$\textcircled{8} \quad \frac{1}{2}x + \frac{5}{7} = -\frac{2}{7} - \frac{5}{14}x$$

両辺に 14 をかけて

$$7x + 10 = -4 - 5x$$

$$12x = -14$$

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

$$\textcircled{9} \quad \frac{2}{3}x + \frac{1}{2} = -\frac{7}{12} + \frac{5}{12}x$$

両辺に 12 をかけて

$$8x + 6 = -7 + 5x$$

$$3x = -13$$

$$x = -\frac{13}{3}$$

$$\textcircled{10} \quad -\frac{5}{6} + \frac{1}{6}x = \frac{1}{4} - \frac{5}{6}x$$

両辺に 12 をかけて

$$-10 + 2x = 3 - 10x$$

$$12x = 13$$

$$x = \frac{13}{12}$$

$$\textcircled{11} \quad -\frac{1}{3} - \frac{1}{3}x = \frac{7}{18} - \frac{1}{6}x$$

両辺に 18 をかけて

$$-6 - 6x = 7 - 3x$$

$$-3x = 13$$

$$x = -\frac{13}{3}$$

$$\textcircled{12} \quad -\frac{7}{9}x - \frac{1}{2} = \frac{5}{6} + \frac{1}{2}x$$

両辺に 18 をかけて

$$-14x - 9 = 15 + 9x$$

$$-23x = 24$$

$$x = -\frac{24}{23}$$

$$\textcircled{13} \quad \frac{3}{8}b + \frac{3}{4} = \frac{3}{16} - \frac{1}{4}b$$

両辺に 16 をかけて

$$6b + 12 = 3 - 4b$$

$$10b = -9$$

$$b = -\frac{9}{10}$$

$$\textcircled{14} \quad -\frac{5}{12}x + \frac{2}{3} = -\frac{1}{3} + \frac{3}{4}x$$

両辺に 12 をかけて

$$-5x + 8 = -4 + 9x$$

$$-14x = -12$$

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