

1次方程式

年 組 名前

/14

■ 次の方程式を解きなさい。

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

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

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

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

⑤ $\frac{1}{6}x - \frac{1}{6} = \frac{2}{3} - \frac{7}{12}x$

⑥ $-\frac{1}{2}x + \frac{1}{2} = \frac{5}{16} + \frac{3}{8}x$

⑦ $-\frac{5}{6}m + \frac{2}{9} = -\frac{8}{9} - \frac{1}{2}m$

⑧ $-2x - \frac{1}{3} = -2 + 2x$

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

⑩ $\frac{1}{3} + \frac{2}{3}s = -\frac{5}{6} + \frac{5}{9}s$

⑪ $\frac{3}{5} - \frac{1}{2}x = \frac{1}{2} - \frac{3}{5}x$

⑫ $-\frac{2}{9}x + \frac{1}{18} = -\frac{2}{3} + \frac{2}{9}x$

⑬ $\frac{5}{9}x - \frac{2}{3} = \frac{5}{9} + \frac{1}{2}x$

⑭ $\frac{1}{3}y + \frac{4}{15} = \frac{1}{3} - \frac{1}{3}y$

■ 次の方程式を解きなさい。

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

両辺に 6 をかけて

$$4x - 1 = -12 - 5x$$

$$9x = -11$$

$$x = -\frac{11}{9}$$

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

両辺に 12 をかけて

$$4x + 4 = 7 + 6x$$

$$-2x = 3$$

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

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

両辺に 12 をかけて

$$6x + 5 = -6 - x$$

$$7x = -11$$

$$x = -\frac{11}{7}$$

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

両辺に 6 をかけて

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

$$-4x = 7$$

$$x = -\frac{7}{4}$$

$$\textcircled{5} \quad \frac{1}{6}x - \frac{1}{6} = \frac{2}{3} - \frac{7}{12}x$$

両辺に 12 をかけて

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

$$9x = 10$$

$$x = \frac{10}{9}$$

$$\textcircled{6} \quad -\frac{1}{2}x + \frac{1}{2} = \frac{5}{16} + \frac{3}{8}x$$

両辺に 16 をかけて

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

$$-14x = -3$$

$$x = \frac{3}{14}$$

$$\textcircled{7} \quad -\frac{5}{6}m + \frac{2}{9} = -\frac{8}{9} - \frac{1}{2}m$$

両辺に 18 をかけて

$$-15m + 4 = -16 - 9m$$

$$-6m = -20$$

$$m = \frac{10}{3}$$

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

両辺に 3 をかけて

$$-6x - 1 = -6 + 6x$$

$$-12x = -5$$

$$x = \frac{5}{12}$$

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

両辺に 6 をかけて

$$3x - 12 = -1 + 12x$$

$$-9x = 11$$

$$x = -\frac{11}{9}$$

$$\textcircled{10} \quad \frac{1}{3} + \frac{2}{3}s = -\frac{5}{6} + \frac{5}{9}s$$

両辺に 18 をかけて

$$6 + 12s = -15 + 10s$$

$$2s = -21$$

$$s = -\frac{21}{2}$$

$$\textcircled{11} \quad \frac{3}{5} - \frac{1}{2}x = \frac{1}{2} - \frac{3}{5}x$$

両辺に 10 をかけて

$$6 - 5x = 5 - 6x$$

$$x = -1$$

$$x = -1$$

$$\textcircled{12} \quad -\frac{2}{9}x + \frac{1}{18} = -\frac{2}{3} + \frac{2}{9}x$$

両辺に 18 をかけて

$$-4x + 1 = -12 + 4x$$

$$-8x = -13$$

$$x = \frac{13}{8}$$

$$\textcircled{13} \quad \frac{5}{9}x - \frac{2}{3} = \frac{5}{9} + \frac{1}{2}x$$

両辺に 18 をかけて

$$10x - 12 = 10 + 9x$$

$$x = 22$$

$$x = 22$$

$$\textcircled{14} \quad \frac{1}{3}y + \frac{4}{15} = \frac{1}{3} - \frac{1}{3}y$$

両辺に 15 をかけて

$$5y + 4 = 5 - 5y$$

$$10y = 1$$

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