

1. 連立方程式 3（加減・分数係数）その 1

次の連立方程式を解きましょう。（解は両方とも整数です。）

$$(1) \quad \begin{cases} -\frac{1}{3}x - \frac{1}{6}y = \frac{1}{6} \\ \frac{2}{9}x + \frac{1}{18}y = -\frac{1}{2} \end{cases}$$

$$(2) \quad \begin{cases} -\frac{2}{5}x - \frac{1}{10}y = -\frac{1}{2} \\ -\frac{1}{5}x - \frac{2}{15}y = -\frac{1}{3} \end{cases}$$

$$(3) \quad \begin{cases} -\frac{1}{4}x - \frac{1}{8}y = -\frac{5}{8} \\ \frac{1}{3}x - \frac{1}{12}y = -\frac{11}{12} \end{cases}$$

$$(4) \quad \begin{cases} 3x - \frac{7}{3}y = 4 \\ -\frac{5}{3}x - y = \frac{14}{3} \end{cases}$$

$$(5) \quad \begin{cases} -\frac{3}{8}x + \frac{7}{8}y = -2 \\ \frac{9}{32}x - \frac{15}{32}y = \frac{3}{16} \end{cases}$$

$$(6) \quad \begin{cases} \frac{1}{6}x + \frac{2}{3}y = \frac{5}{6} \\ -\frac{3}{2}x + \frac{1}{6}y = -\frac{4}{3} \end{cases}$$

$$(7) \quad \begin{cases} 2x - \frac{3}{5}y = \frac{17}{5} \\ -\frac{1}{2}x + \frac{1}{10}y = -\frac{2}{5} \end{cases}$$

$$(8) \quad \begin{cases} -\frac{1}{5}x + \frac{3}{10}y = \frac{4}{5} \\ -\frac{21}{40}x + \frac{9}{20}y = \frac{57}{40} \end{cases}$$

2. 連立方程式 3（加減・分数係数）その2

次の連立方程式を解きましょう。（解は両方とも整数です。）

$$(1) \quad \begin{cases} \frac{7}{8}x - \frac{3}{8}y = 2 \\ \frac{1}{8}x - \frac{1}{4}y = \frac{9}{4} \end{cases}$$

$$(2) \quad \begin{cases} -\frac{3}{5}x + \frac{2}{5}y = -\frac{4}{5} \\ \frac{1}{5}x - \frac{3}{5}y = 4 \end{cases}$$

$$(3) \quad \begin{cases} -\frac{2}{5}x - \frac{9}{10}y = \frac{1}{2} \\ -\frac{1}{4}x - \frac{5}{6}y = -\frac{19}{12} \end{cases}$$

$$(4) \quad \begin{cases} \frac{1}{6}x - \frac{4}{3}y = -2 \\ -\frac{1}{6}x + \frac{2}{3}y = \frac{2}{3} \end{cases}$$

$$(5) \quad \begin{cases} -\frac{3}{5}x + \frac{4}{5}y = \frac{2}{5} \\ \frac{1}{5}x - \frac{4}{5}y = \frac{2}{5} \end{cases}$$

$$(6) \quad \begin{cases} \frac{10}{3}x + \frac{1}{3}y = \frac{13}{3} \\ \frac{2}{3}x - \frac{1}{2}y = -\frac{5}{6} \end{cases}$$

$$(7) \quad \begin{cases} -\frac{4}{3}x - y = \frac{1}{3} \\ \frac{2}{9}x + \frac{4}{9}y = \frac{2}{9} \end{cases}$$

$$(8) \quad \begin{cases} -\frac{1}{10}x + \frac{1}{10}y = \frac{1}{2} \\ \frac{1}{5}x - \frac{1}{15}y = -\frac{7}{15} \end{cases}$$

3. 連立方程式 3（加減・分数係数）その3

次の連立方程式を解きましょう。（解は両方とも整数です。）

$$(1) \quad \begin{cases} -\frac{1}{5}x - \frac{3}{10}y = -\frac{1}{5} \\ -\frac{1}{2}x + \frac{2}{5}y = \frac{9}{5} \end{cases}$$

$$(2) \quad \begin{cases} -\frac{5}{8}x - \frac{3}{8}y = -\frac{3}{2} \\ \frac{9}{16}x + \frac{7}{16}y = \frac{3}{4} \end{cases}$$

$$(3) \quad \begin{cases} \frac{5}{8}x + \frac{7}{8}y = -\frac{13}{8} \\ \frac{1}{6}x - \frac{1}{12}y = -\frac{3}{4} \end{cases}$$

$$(4) \quad \begin{cases} \frac{2}{5}x - \frac{1}{5}y = \frac{2}{5} \\ \frac{8}{15}x - \frac{2}{5}y = \frac{4}{15} \end{cases}$$

$$(5) \quad \begin{cases} \frac{1}{6}x + \frac{1}{6}y = -\frac{4}{3} \\ -\frac{1}{18}x - \frac{1}{36}y = \frac{7}{18} \end{cases}$$

$$(6) \quad \begin{cases} -x - \frac{5}{8}y = \frac{5}{4} \\ -\frac{5}{8}x - \frac{1}{8}y = -\frac{15}{8} \end{cases}$$

$$(7) \quad \begin{cases} -\frac{3}{10}x - \frac{2}{5}y = \frac{3}{5} \\ \frac{21}{40}x + \frac{27}{40}y = -\frac{3}{4} \end{cases}$$

$$(8) \quad \begin{cases} \frac{1}{5}x + \frac{1}{5}y = \frac{2}{5} \\ -\frac{9}{5}x - 2y = -2 \end{cases}$$

4. 連立方程式 3（加減・分数係数）その 4

次の連立方程式を解きましょう。（解は両方とも整数です。）

$$(1) \quad \begin{cases} -x - \frac{4}{5}y = \frac{8}{5} \\ \frac{4}{15}x + \frac{2}{15}y = \frac{14}{15} \end{cases}$$

$$(2) \quad \begin{cases} \frac{5}{6}x - \frac{2}{3}y = -1 \\ x - \frac{5}{6}y = -\frac{11}{6} \end{cases}$$

$$(3) \quad \begin{cases} \frac{2}{3}x + \frac{5}{6}y = -\frac{7}{3} \\ \frac{1}{8}x + \frac{1}{8}y = -\frac{1}{4} \end{cases}$$

$$(4) \quad \begin{cases} -\frac{5}{3}x - 2y = -\frac{17}{3} \\ -\frac{2}{9}x - \frac{7}{9}y = -\frac{16}{9} \end{cases}$$

$$(5) \quad \begin{cases} -\frac{1}{2}x + \frac{2}{3}y = -3 \\ -\frac{1}{12}x - \frac{1}{4}y = \frac{5}{3} \end{cases}$$

$$(6) \quad \begin{cases} \frac{1}{10}x + \frac{3}{10}y = -\frac{9}{10} \\ -\frac{1}{15}x - \frac{4}{15}y = \frac{3}{5} \end{cases}$$

$$(7) \quad \begin{cases} -\frac{2}{5}x + \frac{1}{5}y = \frac{4}{5} \\ -\frac{3}{20}x + \frac{1}{10}y = \frac{1}{10} \end{cases}$$

$$(8) \quad \begin{cases} \frac{1}{6}x - \frac{1}{3}y = -\frac{11}{6} \\ -\frac{5}{18}x - \frac{1}{6}y = -\frac{5}{9} \end{cases}$$

5. 連立方程式 3（加減・分数係数）その5

次の連立方程式を解きましょう。（解は両方とも整数です。）

$$(1) \quad \begin{cases} -\frac{1}{5}x - \frac{8}{5}y = \frac{17}{5} \\ -\frac{1}{5}x - \frac{7}{10}y = \frac{8}{5} \end{cases}$$

$$(2) \quad \begin{cases} \frac{2}{3}x + \frac{1}{3}y = -\frac{16}{3} \\ -\frac{3}{4}x + \frac{5}{12}y = \frac{5}{4} \end{cases}$$

$$(3) \quad \begin{cases} x - \frac{1}{3}y = -\frac{1}{3} \\ \frac{5}{6}x - \frac{1}{3}y = -\frac{4}{3} \end{cases}$$

$$(4) \quad \begin{cases} -\frac{9}{8}x - y = -\frac{5}{4} \\ \frac{9}{16}x + \frac{1}{8}y = 1 \end{cases}$$

$$(5) \quad \begin{cases} \frac{3}{2}x - \frac{1}{6}y = -\frac{7}{6} \\ \frac{1}{3}x + \frac{1}{12}y = -\frac{1}{2} \end{cases}$$

$$(6) \quad \begin{cases} -\frac{1}{3}x + \frac{5}{6}y = \frac{17}{6} \\ \frac{5}{18}x + \frac{1}{3}y = \frac{13}{18} \end{cases}$$

$$(7) \quad \begin{cases} -\frac{1}{10}x + \frac{1}{10}y = -\frac{6}{5} \\ \frac{1}{6}x - \frac{7}{12}y = \frac{7}{6} \end{cases}$$

$$(8) \quad \begin{cases} \frac{6}{5}x + y = -\frac{1}{5} \\ \frac{1}{5}x + \frac{4}{5}y = -\frac{16}{5} \end{cases}$$