

1 次の方程式を解きなさい。

$$\textcircled{1} \quad \frac{x+7}{4} = \frac{2x+8}{6}$$

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

$$\textcircled{3} \quad \frac{8x+4}{5} = \frac{5x+2}{3}$$

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

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

$$\textcircled{6} \quad \frac{2}{3}x + 2 = \frac{2}{7}x + 10$$

1 次の方程式を解きなさい。

$$\textcircled{1} \quad \frac{x+7}{4} = \frac{2x+8}{6}$$

$$\left(\frac{x+7}{\cancel{4}_1}\right) \times \overset{3}{\cancel{12}} = \left(\frac{2x+8}{\cancel{6}_1}\right) \times \overset{2}{\cancel{12}}$$

$$3x+21=4x+16$$

$$3x-4x=16-21$$

$$-x=-5$$

$$x=5$$

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

$$\left(\frac{1}{4}x+4\right) \times 20 = \left(\frac{2}{5}x+1\right) \times 20$$

$$5x+80=8x+20$$

$$5x-8x=20-80$$

$$-3x=-60$$

$$x=20$$

$$\textcircled{3} \quad \frac{8x+4}{5} = \frac{5x+2}{3}$$

$$\left(\frac{8x+4}{\cancel{5}_1}\right) \times \overset{3}{\cancel{15}} = \left(\frac{5x+2}{\cancel{3}_1}\right) \times \overset{5}{\cancel{15}}$$

$$24x+12=25x+10$$

$$24x-25x=10-12$$

$$-x=-2$$

$$x=2$$

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

$$\left(\frac{3}{5}x+1\right) \times 10 = \left(\frac{1}{2}x+2\right) \times 10$$

$$6x+10=5x+20$$

$$6x-5x=20-10$$

$$x=10$$

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

$$\left(\frac{x+1}{\cancel{2}_1}\right) \times \overset{3}{\cancel{6}} = \left(\frac{x+5}{\cancel{3}_1}\right) \times \overset{2}{\cancel{6}}$$

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

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

$$x=7$$

$$\textcircled{6} \quad \frac{2}{3}x+2 = \frac{2}{7}x+10$$

$$\left(\frac{2}{3}x+2\right) \times 21 = \left(\frac{2}{7}x+10\right) \times 21$$

$$14x+42=6x+210$$

$$14x-6x=210-42$$

$$8x=168$$

$$x=21$$