

分数の一次式の減法

次の計算をしましょう。

$$\textcircled{1} \left(\frac{2}{5}x - \frac{3}{5} \right) - \left(\frac{1}{6}x - \frac{3}{7} \right)$$

$$\textcircled{4} \left(\frac{1}{4}x - \frac{3}{7} \right) - \left(-\frac{2}{3}x - \frac{7}{8} \right)$$

$$\textcircled{2} \left(\frac{6}{7}x + \frac{2}{5} \right) - \left(\frac{5}{8}x + \frac{3}{7} \right)$$

$$\textcircled{5} \left(\frac{2}{5}x - \frac{2}{7} \right) - \left(-\frac{3}{7}x + \frac{2}{3} \right)$$

$$\textcircled{3} \left(\frac{4}{7}x - \frac{1}{7} \right) - \left(\frac{1}{6}x - \frac{2}{3} \right)$$

$$\textcircled{6} \left(\frac{1}{7}x - \frac{4}{7} \right) - \left(-\frac{6}{9}x - \frac{1}{5} \right)$$

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次の計算をしましょう。

$$\begin{aligned}\textcircled{1} \quad & \left(\frac{2}{5}x - \frac{3}{5}\right) - \left(\frac{1}{6}x - \frac{3}{7}\right) \\ &= \frac{2}{5}x - \frac{1}{6}x - \frac{3}{5} + \frac{3}{7} \\ &= \frac{12}{30}x - \frac{5}{30}x - \frac{21}{35} + \frac{15}{35} \\ &= \frac{7}{30}x - \frac{6}{35}\end{aligned}$$

$$\begin{aligned}\textcircled{4} \quad & \left(\frac{1}{4}x - \frac{3}{7}\right) - \left(-\frac{2}{3}x - \frac{7}{8}\right) \\ &= \frac{1}{4}x + \frac{2}{3}x - \frac{3}{7} + \frac{7}{8} \\ &= \frac{3}{12}x + \frac{8}{12}x - \frac{24}{56} + \frac{49}{56} \\ &= \frac{11}{12}x + \frac{25}{56}\end{aligned}$$

$$\begin{aligned}\textcircled{2} \quad & \left(\frac{6}{7}x + \frac{2}{5}\right) - \left(\frac{5}{8}x + \frac{3}{7}\right) \\ &= \frac{6}{7}x - \frac{5}{8}x + \frac{2}{5} - \frac{3}{7} \\ &= \frac{48}{56}x - \frac{35}{56}x + \frac{14}{35} - \frac{15}{35} \\ &= \frac{13}{56}x - \frac{1}{35}\end{aligned}$$

$$\begin{aligned}\textcircled{5} \quad & \left(\frac{2}{5}x - \frac{2}{7}\right) - \left(-\frac{3}{7}x + \frac{2}{3}\right) \\ &= \frac{2}{5}x + \frac{3}{7}x - \frac{2}{7} - \frac{2}{3} \\ &= \frac{14}{35}x + \frac{15}{35}x - \frac{6}{21} - \frac{14}{21} \\ &= \frac{29}{35}x - \frac{20}{21}\end{aligned}$$

$$\begin{aligned}\textcircled{3} \quad & \left(\frac{4}{7}x - \frac{1}{7}\right) - \left(\frac{1}{6}x - \frac{2}{3}\right) \\ &= \frac{4}{7}x - \frac{1}{6}x - \frac{1}{7} + \frac{2}{3} \\ &= \frac{24}{42}x - \frac{7}{42}x - \frac{3}{21} + \frac{14}{21} \\ &= \frac{17}{42}x + \frac{11}{21}\end{aligned}$$

$$\begin{aligned}\textcircled{6} \quad & \left(\frac{1}{7}x - \frac{4}{7}\right) - \left(-\frac{6}{9}x - \frac{1}{5}\right) \\ &= \frac{1}{7}x + \frac{6}{9}x - \frac{4}{7} + \frac{1}{5} \\ &= \frac{9}{63}x + \frac{42}{63}x - \frac{20}{35} + \frac{7}{35} \\ &= \frac{51}{63}x - \frac{13}{35} \\ &= \frac{17}{21}x - \frac{13}{35}\end{aligned}$$