

異分母分數加法和減法

Addition and Subtraction of

Fractions with Different Denominators



把下列各分數進行通分：

Find the equivalent fraction of each group of fractions :

① $\frac{1}{4}, \frac{2}{3}$

3和4的L.C.M.是
 L.C.M. of 3 and 4 is 12

$$\frac{1}{4} = \frac{1 \times (3)}{4 \times (3)} = \frac{(3)}{(12)}$$

$$\frac{2}{3} = \frac{2 \times (4)}{3 \times (4)} = \frac{(8)}{(12)}$$

② $\frac{2}{3}, \frac{7}{15}$

3和15的L.C.M.是
 L.C.M. of 3 and 15 is 15

$$\frac{2}{3} = \frac{2 \times (5)}{3 \times (5)} = \frac{(10)}{(15)}$$

$$\frac{7}{15} = \frac{7 \times (1)}{15 \times (1)} = \frac{(7)}{(15)}$$

③ $\frac{1}{2}, \frac{3}{4}, \frac{7}{12}$

2、4、12的L.C.M.是
 L.C.M. of 2, 4 and 12 is 12

$$\frac{1}{2} = \frac{1 \times (6)}{2 \times (6)} = \frac{(6)}{(12)}$$

$$\frac{3}{4} = \frac{3 \times (3)}{4 \times (3)} = \frac{(9)}{(12)}$$

$$\frac{7}{12} = \frac{7 \times (1)}{12 \times (1)} = \frac{(7)}{(12)}$$

④ $\frac{2}{3}, \frac{1}{6}, \frac{3}{8}$

3、6、8的L.C.M.是
 L.C.M. of 3, 6 and 8 is 24

$$\frac{2}{3} = \frac{2 \times (8)}{3 \times (8)} = \frac{(16)}{(24)}$$

$$\frac{1}{6} = \frac{1 \times (4)}{6 \times (4)} = \frac{(4)}{(24)}$$

$$\frac{3}{8} = \frac{3 \times (3)}{8 \times (3)} = \frac{(9)}{(24)}$$

計算：(答案約至最簡。)

Calculating: (Answer in simplest fraction.)

$$\begin{aligned} \textcircled{1} \quad & \frac{1}{4} + \frac{2}{3} \\ &= \frac{(\quad 3 \quad)}{12} + \frac{(\quad 8 \quad)}{12} \\ &= \frac{(\quad 11 \quad)}{(\quad 12 \quad)} \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & \frac{2}{3} - \frac{7}{15} \\ &= \frac{(\quad 10 \quad)}{15} - \frac{7}{15} \\ &= \frac{(\quad 1 \quad)}{(\quad 5 \quad)} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & \frac{7}{10} + \frac{5}{6} \\ &= \frac{(\quad 21 \quad)}{30} + \frac{(\quad 25 \quad)}{30} \\ &= (\quad 1 \quad) \frac{(\quad 8 \quad)}{(\quad 15 \quad)} \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 4\frac{1}{4} - 1\frac{5}{6} \\ &= \underline{3\frac{15}{12} - 1\frac{10}{12}} \\ &= \underline{2\frac{5}{12}} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & 3 - 1\frac{1}{4} \\ &= \underline{2\frac{4}{4} - 1\frac{1}{4}} \\ &= \underline{1\frac{3}{4}} \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 6\frac{1}{6} - 4 \\ &= \underline{2\frac{1}{6}} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & 4\frac{5}{9} - 4\frac{1}{3} \\ &= \underline{4\frac{5}{9} - 4\frac{3}{9}} \\ &= \underline{\frac{2}{9}} \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & 5 + 2\frac{2}{3} \\ &= \underline{7\frac{2}{3}} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & 10 + \frac{4}{5} \\ &= \underline{10\frac{4}{5}} \\ &= \underline{\hspace{2cm}} \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & \frac{11}{12} - \frac{1}{3} - \frac{1}{4} \\ &= \underline{\frac{11}{12} - \frac{4}{12} - \frac{3}{12}} \\ &= \underline{\frac{4}{12}} \\ &= \underline{\frac{1}{3}} \end{aligned}$$

$$\begin{aligned} \textcircled{11} \quad & \frac{1}{3} + 5 - 1\frac{2}{5} \\ &= \underline{5\frac{5}{15} - 1\frac{6}{15}} \\ &= \underline{4\frac{20}{15} - 1\frac{6}{15}} \\ &= \underline{3\frac{14}{15}} \end{aligned}$$

$$\begin{aligned} \textcircled{12} \quad & 6\frac{7}{10} - 1\frac{1}{2} - 2\frac{3}{5} \\ &= \underline{5\frac{17}{10} - 1\frac{5}{10} - 2\frac{6}{10}} \\ &= \underline{2\frac{6}{10}} \\ &= \underline{2\frac{3}{5}} \end{aligned}$$