

小数と分数の加法

小数は分数にして、通分して計算する。

$$\begin{aligned} \left(+\frac{1}{5}\right) + (-0.1) &= \left(+\frac{1}{5}\right) + \left(-\frac{1}{10}\right) && \leftarrow \text{小数を分数にする} \\ &= +\left(\frac{2}{10} - \frac{1}{10}\right) && \leftarrow \text{通分して計算する} \\ &= +\frac{1}{10} \end{aligned}$$

1 次の計算をしなさい。

① $\left(+\frac{5}{6}\right) + (-0.2)$

② $(+0.3) + \left(+\frac{1}{2}\right)$

③ $(-0.1) + \left(-\frac{2}{3}\right)$

④ $\left(-\frac{3}{7}\right) + (-0.4)$

⑤ $\left(+\frac{3}{4}\right) + (-2.3)$

⑥ $\left(+\frac{7}{9}\right) + (-3.1)$

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1 次の計算をしなさい。

$$\begin{aligned} \text{①} \quad &\left(+\frac{5}{6}\right) + (-0.2) \\ &= \left(+\frac{5}{6}\right) + \left(-\frac{2}{10}\right) \\ &= \left(+\frac{25}{30}\right) + \left(-\frac{6}{30}\right) \\ &= +\left(\frac{25}{30} - \frac{6}{30}\right) \\ &= +\frac{19}{30} \end{aligned}$$

$$\begin{aligned} \text{②} \quad &(+0.3) + \left(+\frac{1}{2}\right) \\ &= \left(+\frac{3}{10}\right) + \left(+\frac{1}{2}\right) \\ &= +\left(\frac{3}{10} + \frac{5}{10}\right) \\ &= +\frac{8}{10} \\ &= +\frac{4}{5} \end{aligned}$$

$$\begin{aligned} \text{③} \quad &(-0.1) + \left(-\frac{2}{3}\right) \\ &= \left(+\frac{1}{10}\right) + \left(-\frac{2}{3}\right) \\ &= \left(+\frac{3}{30}\right) + \left(-\frac{20}{30}\right) \\ &= -\left(\frac{20}{30} - \frac{3}{30}\right) \\ &= -\frac{17}{30} \end{aligned}$$

$$\begin{aligned} \text{④} \quad &\left(-\frac{3}{7}\right) + (-0.4) \\ &= \left(-\frac{3}{7}\right) + \left(-\frac{4}{10}\right) \\ &= \left(-\frac{3}{7}\right) + \left(-\frac{2}{5}\right) \\ &= \left(-\frac{15}{35}\right) + \left(-\frac{14}{35}\right) \\ &= -\left(\frac{15}{35} + \frac{14}{35}\right) = -\frac{29}{35} \end{aligned}$$

$$\begin{aligned} \text{⑤} \quad &\left(+\frac{3}{4}\right) + (-2.3) \\ &= \left(+\frac{3}{4}\right) + \left(-\frac{23}{10}\right) \\ &= \left(+\frac{15}{20}\right) + \left(-\frac{46}{20}\right) \\ &= -\left(\frac{46}{20} - \frac{15}{20}\right) = -\frac{31}{20} = -1\frac{11}{20} \end{aligned}$$

$$\begin{aligned} \text{⑥} \quad &\left(+\frac{7}{9}\right) + (-3.1) \\ &= \left(+\frac{7}{9}\right) + \left(-\frac{31}{10}\right) \\ &= \left(+\frac{70}{90}\right) + \left(-\frac{279}{90}\right) \\ &= -\left(\frac{279}{90} - \frac{70}{90}\right) = -\frac{209}{90} = -2\frac{29}{90} \end{aligned}$$