

Addition and Subtraction of Fractions with Unlike Denominators

1

$$\frac{2}{3} + \frac{1}{4} =$$

A. $\frac{11}{12}$

B. $\frac{5}{7}$

C. $\frac{3}{7}$

D. $\frac{5}{12}$

2

$$\frac{5}{6} - \frac{1}{3} =$$

A. $\frac{1}{2}$

B. $\frac{2}{3}$

C. $\frac{1}{3}$

D. $\frac{1}{6}$

3

Find the sum of $\frac{1}{3}$ and $\frac{2}{9}$. _____

4 Find the value of $\frac{1}{3} + \frac{4}{7}$ () .

A. $\frac{4}{21}$

B. $\frac{5}{10}$

C. $\frac{3}{4}$

D. $\frac{19}{21}$

5 Calculate $\frac{5}{12} + \frac{3}{8} =$ () .

A. $\frac{8}{20}$

B. $\frac{5}{32}$

C. $\frac{3}{4}$

D. $\frac{19}{24}$

6 Find the value of $\frac{1}{2} + \frac{3}{10}$. _____

7 Calculate:

(1) $\frac{3}{7} + \frac{2}{14} = \underline{\hspace{2cm}}$

(2) $\frac{9}{10} - \frac{1}{2} = \underline{\hspace{2cm}}$

(3) $\frac{5}{6} - \frac{7}{18} = \underline{\hspace{2cm}}$

8 Calculate:

(1) $\frac{1}{2} + \frac{1}{4} = \underline{\hspace{2cm}}$

(2) $\frac{3}{10} + \frac{11}{20} = \underline{\hspace{2cm}}$

(3) $\frac{1}{2} - \frac{1}{3} = \underline{\hspace{2cm}}$

(4) $\frac{1}{6} - \frac{1}{8} = \underline{\hspace{2cm}}$

9 Calculate: (write the answers in the simplest form of fraction)

(1) $\frac{1}{7} + \frac{4}{21} = \underline{\hspace{2cm}}$

(2) $\frac{3}{10} + \frac{13}{40} = \underline{\hspace{2cm}}$

(3) $\frac{8}{15} - \frac{1}{5} = \underline{\hspace{2cm}}$

(4) $\frac{13}{18} - \frac{2}{9} = \underline{\hspace{2cm}}$

10 Calculate: (write the answers in form of fractions)

$\frac{2}{3} + \frac{1}{5} = \underline{\hspace{2cm}}$

$\frac{1}{2} - \frac{3}{7} = \underline{\hspace{2cm}}$

$\frac{1}{4} - \frac{1}{9} = \underline{\hspace{2cm}}$

$\frac{5}{6} + \frac{1}{8} = \underline{\hspace{2cm}}$

Addition and Subtraction of Fractions with Unlike Denominators

1 $\frac{2}{3} + \frac{1}{4} =$
A. $\frac{11}{12}$

B. $\frac{5}{7}$

C. $\frac{3}{7}$

D. $\frac{5}{12}$

Answer A

Solution $\frac{2}{3} + \frac{1}{4} = \frac{8}{12} + \frac{3}{12} = \frac{11}{12}$

2 $\frac{5}{6} - \frac{1}{3} =$
A. $\frac{1}{2}$

B. $\frac{2}{3}$

C. $\frac{1}{3}$

D. $\frac{1}{6}$

Answer A

Solution $\frac{5}{6} - \frac{1}{3} = \frac{5}{6} - \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$

3 Find the sum of $\frac{1}{3}$ and $\frac{2}{9}$. _____

Answer $\frac{5}{9}$

Solution N/A.

4 Find the value of $\frac{1}{3} + \frac{4}{7}$ () .
A. $\frac{4}{21}$

B. $\frac{5}{10}$

C. $\frac{3}{4}$

D. $\frac{19}{21}$

Answer D

5 Calculate $\frac{5}{12} + \frac{3}{8} = (\quad)$.

A. $\frac{8}{20}$

B. $\frac{5}{32}$

C. $\frac{3}{4}$

D. $\frac{19}{24}$

Answer D

6 Find the value of $\frac{1}{2} + \frac{3}{10}$. _____

Answer $\frac{4}{5}$

Solution $\frac{1}{2} + \frac{3}{10} = \frac{5}{10} + \frac{3}{10} = \frac{8}{10} = \frac{4}{5}$.

7 Calculate:

(1) $\frac{3}{7} + \frac{2}{14} =$ _____

(2) $\frac{9}{10} - \frac{1}{2} =$ _____

(3) $\frac{5}{6} - \frac{7}{18} =$ _____

Answer (1) $\frac{4}{7}$

(2) $\frac{2}{5}$

Alternative: 0.4

(3) $\frac{4}{9}$

Solution (1) $\frac{3}{7} + \frac{2}{14} = \frac{6}{14} + \frac{2}{14} = \frac{8}{14} = \frac{4}{7}$

(2) $\frac{9}{10} - \frac{1}{2} = \frac{9}{10} - \frac{5}{10} = \frac{4}{10} = \frac{2}{5}$

(3) $\frac{5}{6} - \frac{7}{18} = \frac{15}{18} - \frac{7}{18} = \frac{8}{18} = \frac{4}{9}$

8 Calculate:

(1) $\frac{1}{2} + \frac{1}{4} =$ _____

$$(2) \frac{3}{10} + \frac{11}{20} = \underline{\hspace{2cm}}$$

$$(3) \frac{1}{2} - \frac{1}{3} = \underline{\hspace{2cm}}$$

$$(4) \frac{1}{6} - \frac{1}{8} = \underline{\hspace{2cm}}$$

Answer (1) $\frac{3}{4}$

Alternative: 0.75

$$(2) \frac{17}{20}$$

Alternative: 0.85

$$(3) \frac{1}{6}$$

$$(4) \frac{1}{24}$$

Solution

$$(1) \frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

$$(2) \frac{3}{10} + \frac{11}{20} = \frac{6}{20} + \frac{11}{20} = \frac{17}{20}$$

$$(3) \frac{1}{2} - \frac{1}{3} = \frac{3}{6} - \frac{2}{6} = \frac{1}{6}$$

$$(4) \frac{1}{6} - \frac{1}{8} = \frac{4}{24} - \frac{3}{24} = \frac{1}{24}$$

9 Calculate: (write the answers in the simplest form of fraction)

$$(1) \frac{1}{7} + \frac{4}{21} = \underline{\hspace{2cm}}$$

$$(2) \frac{3}{10} + \frac{13}{40} = \underline{\hspace{2cm}}$$

$$(3) \frac{8}{15} - \frac{1}{5} = \underline{\hspace{2cm}}$$

$$(4) \frac{13}{18} - \frac{2}{9} = \underline{\hspace{2cm}}$$

Answer (1) $\frac{1}{3}$

$$(2) \frac{5}{8}$$

$$(3) \frac{1}{3}$$

$$(4) \frac{1}{2}$$

Solution

$$(1) \frac{1}{7} + \frac{4}{21} = \frac{3}{21} + \frac{4}{21} = \frac{7}{21} = \frac{1}{3}$$

$$(2) \frac{3}{10} + \frac{13}{40} = \frac{12}{40} + \frac{13}{40} = \frac{25}{40} = \frac{5}{8}$$

$$(3) \frac{8}{15} - \frac{1}{5} = \frac{8}{15} - \frac{3}{15} = \frac{5}{15} = \frac{1}{3}$$

$$(4) \quad \frac{13}{18} - \frac{2}{9} = \frac{13}{18} - \frac{4}{18} = \frac{9}{18} = \frac{1}{2}$$

10 Calculate: (write the answers in form of fractions)

$$\begin{aligned} \frac{2}{3} + \frac{1}{5} &= \underline{\hspace{2cm}} \\ \frac{1}{2} - \frac{3}{7} &= \underline{\hspace{2cm}} \\ \frac{1}{4} - \frac{1}{9} &= \underline{\hspace{2cm}} \\ \frac{5}{6} + \frac{1}{8} &= \underline{\hspace{2cm}} \end{aligned}$$

Answer $\frac{13}{15}, \frac{1}{14}, \frac{5}{36}, \frac{23}{24}$

Solution

$$\begin{aligned} \frac{2}{3} + \frac{1}{5} &= \frac{10}{15} + \frac{3}{15} = \frac{13}{15} \\ \frac{1}{2} - \frac{3}{7} &= \frac{7}{14} - \frac{6}{14} = \frac{1}{14} \\ \frac{1}{4} - \frac{1}{9} &= \frac{9}{36} - \frac{4}{36} = \frac{5}{36} \\ \frac{5}{6} + \frac{1}{8} &= \frac{20}{24} + \frac{3}{24} = \frac{23}{24} \text{ or } \frac{1}{6} + \frac{3}{8} = \frac{40}{48} + \frac{6}{48} = \frac{46}{48} = \frac{23}{24} \end{aligned}$$