MATHEMATICS 5

Modified In-School Off-School Approach Modules (MISOSA)

Distance Education for Elementary Schools

SELF-INSTRUCTIONAL MATERIALS

ADDITION OF DISSIMILAR FRACTIONS AND WHOLE NUMBERS

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ADDITION OF DISSIMILAR FRACTIONS AND WHOLE NUMBERS

Objective: Add dissimilar fractions and whole numbers

Review

Add and reduce the sum to lowest terms.

1) $\frac{3}{11}+\frac{2}{3}=$

2) $\frac{2}{9}+\frac{1}{4}=$

3) $\frac{6}{15}+\frac{1}{3}=$

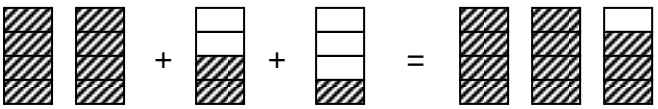
4) $\frac{4}{7}+\frac{3}{4}=$

5) $\frac{4}{9}+\frac{1}{6}$

Study and Learn

Mang Joaquin painted the fence for 2 hours, the window panes for $\frac{1}{2}$ of an hour and the door for $\frac{1}{4}$ of an hour. How many hours did Mang Joaquin spend painting?

Let's try to picture the problem.



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

Mang Joaquin spent $2\frac{3}{4}$ hours painting.

Let us solve the same problem by computation.
Study the steps carefully.

1st Align the fractions and the whole numbers separately

2nd Change the fractions to similar fractions

3rd Add the fractions then the whole numbers

$$\begin{array}{r} 2 \\ \frac{1}{2} \\ +\ \frac{1}{4} \\ \hline \end{array} \qquad \begin{array}{r} 2 \\ \frac{1}{2} \to \frac{2}{4} \\ +\ \frac{1}{4} \to \frac{1}{4} \\ \hline \end{array} \qquad \begin{array}{r} 2 \\ \frac{2}{4} \\ +\ \frac{1}{4} \\ \hline 2\frac{3}{4} \end{array}$$

The sum is $2\frac{3}{4}$.

Here are other examples for you to study.

1) $\begin{array}{r} 3 \\ +\ \frac{4}{5} \to \frac{24}{30} \\ \frac{1}{6} \to \frac{5}{30} \\ \hline 3\frac{29}{30} \end{array}$ 2) $\begin{array}{r} 5 \\ \frac{2}{15} \to \frac{2}{15} \\ +\ \frac{1}{5} \to \frac{3}{15} \\ \hline 5\frac{5}{15} = 5\frac{1}{3} \end{array}$

3) $\begin{array}{r} 3 \\ \frac{4}{7} \to \frac{12}{21} \\ +\ \frac{2}{3} \to \frac{14}{21} \\ \hline 3\frac{26}{21} = 4\frac{5}{21} \end{array}$

Try These

A. Write the missing number then add. Reduce your answers to lowest terms.

a. $8\ \frac{3}{4} \rightarrow$

$+\ \frac{1}{6} \rightarrow$

b. $6\ \frac{4}{9} \rightarrow$

$+\ \frac{2}{3} \rightarrow$

c. $2\ \frac{3}{7} \rightarrow$

$+\ \frac{1}{2} \rightarrow$

d. $\frac{1}{4}$

$\frac{2}{5} \rightarrow$

$+\ 9$

e. $8\ \frac{2}{3} \rightarrow$

$+\ \frac{1}{8} \rightarrow$

Wrap Up

In adding dissimilar fractions and whole numbers:

a. align the whole numbers and the fractions separately
b. change the fractions to similar fractions
c. add the fractions then the whole numbers
d. simplify the answer to its lowest term when needed

On Your Own

Add. Reduce your answer to its lowest term.

1) $4\frac{2}{7} + \frac{3}{4}$

2) $3\frac{7}{9} + \frac{2}{3}$

3) $2\frac{2}{7} + \frac{1}{4}$

4) $6\frac{1}{4} + \frac{3}{5}$

5) $7\frac{1}{6} + \frac{2}{3}$

Check your answer with the answer key. If you get…

4-5	Excellent! You can now proceed with the next lesson.
3-2	Poor! You need to review the process you missed.
0-1	Very poor! You need to repeat the whole process. Ask your teacher or elder to help you.

Key to Correction
ADDITION OF DISSIMILAR FRACTIONS AND WHOLE NUMBERS

REVIEW

1) $\frac{31}{33}$
2) $\frac{17}{36}$
3) $\frac{11}{15}$
4) $1\frac{9}{28}$
5) $\frac{11}{18}$

TRY THESE

1) $8\frac{11}{12}$
2) $7\frac{1}{9}$
3) $2\frac{13}{14}$
4) $9\frac{13}{20}$
5) $8\frac{19}{24}$

ON YOUR OWN

1) $5\frac{1}{28}$
2) $4\frac{4}{9}$
3) $2\frac{15}{28}$
4) $6\frac{17}{20}$
5) $7\frac{5}{6}$