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Modified In-School Off-School Approach Modules (MISOSA)
Distance Education for Elementary Schools
SELF-INSTRUCTIONAL MATERIALS



**ESTIMATION OF
SUM OF FRACTIONS**



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Revised 2010

by the Learning Resource Management and Development System (LRMDS),
DepEd - Division of Negros Occidental
under the Strengthening the Implementation of Basic Education
in Selected Provinces in the Visayas (STRIVE).

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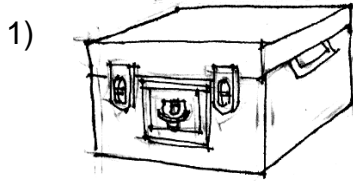


ESTIMATION OF SUM OF FRACTIONS

Objective: Estimate the sum of fractions

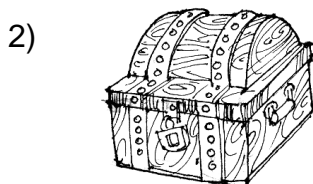


Match the chest with the correct key.
To do that, answer the problems under each treasure chest and look for the key with the correct answer.



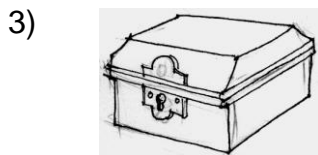
110

What is the estimated sum of 125 and 268?



90

Estimate the sum of 78 and 31.



400

The estimated sum of 25 and 57 is _____.





Study and Learn

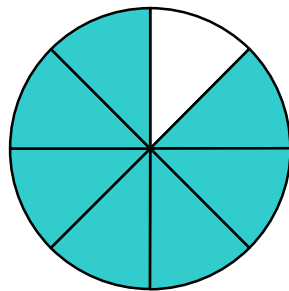
Read the problem below.

Miguel and Mike bought a whole pizza pie. Miguel ate $\frac{7}{8}$ of his pizza pie. Mike ate $\frac{4}{6}$ of his. They shared the rest with their classmates. About how much of pizza was eaten?

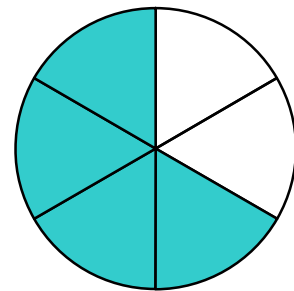
What did Miguel and Mike do with the rest of the pizza? (*They gave it to their classmates.*) What kind of persons are they?

Are you willing to do what they did?

Fraction circles are helpful when you are estimating the value of fractions. It is easier to decide whether the fractions are close to 0, $\frac{1}{2}$ or 1.



$$\frac{7}{8}$$



$$\frac{4}{6}$$

In the problem above, we are asked to estimate the sum.

$$\frac{7}{8} + \frac{4}{6}$$

$\frac{7}{8}$ The numerator is nearly equal to the denominator.

$\frac{7}{8}$ is close to 1.





$\frac{4}{6}$ The numerator is about half the denominator.

$\frac{4}{6}$ is close to $\frac{1}{2}$.

So $1 + \frac{1}{2} = 1\frac{1}{2}$

About $1\frac{1}{2}$ pizza was eaten.

Let us try another example.

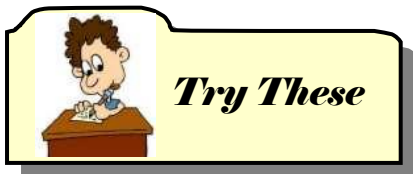
What is the estimated sum of $\frac{9}{10} + \frac{2}{3}$?

$\frac{9}{10}$ is close to 1. Why?

$\frac{2}{3}$ is close to 1. Why?

$$\frac{9}{10} + \frac{2}{3} = 1 + 1 = 2$$

$\frac{9}{10} + \frac{2}{3}$ is close to 2.



Estimate the sum.

1. $\frac{5}{8}$ $\frac{5}{8}$ is close to ____.

$\frac{1}{10}$ $\frac{1}{10}$ is close to ____.

$\frac{5}{8}$ $\frac{1}{10}$ is close to ____.

2. $\frac{4}{5}$ $\frac{4}{5}$ is close to ____.

$\frac{24}{25}$ $\frac{24}{25}$ is close to ____.

$\frac{4}{5}$ $\frac{24}{25}$ is close to ____.





Wrap Up

In estimating the sum of fractions, first determine whether each fraction is closest to 0, $\frac{1}{2}$ or 1. Then add the estimates.



On Your Own

Estimate the sum.

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

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

3) $\frac{3}{8} + \frac{7}{9}$

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

5) $\frac{11}{12} + \frac{4}{8}$

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

- 4-5 Excellent! You may now proceed to the next lesson.
- 3 You need to review the processes you missed.
- 0-2 You need to repeat the whole process. Ask your teacher or elder to help you.





Key to Corrections
ESTIMATION OF SUM OF FRACTION

REVIEW

- 1) C
- 2) A
- 3) B

TRY THESE

$$\begin{array}{r} 1) \quad \frac{1}{2} \\ \quad + 0 \\ \hline \quad \frac{1}{2} \end{array}$$

$$\begin{array}{r} 2) \quad \frac{1}{2} \\ \quad + 1 \\ \hline \quad \frac{3}{2} \end{array}$$

ON YOUR OWN

- 1) $1\frac{1}{2}$
- 2) $1\frac{1}{2}$
- 3) $1\frac{1}{2}$

