OSEB EDUCATIONAL CONSULT KAMPALA

PRIMARY FOUR MATHEMATICS

SPECIAL TOPICAL QUESTIONS

FOUR-2024 SERIE 4

Topical Evaluation And Assessment – Standard Curriculum

Name: ..... Stream:.....

TOPIC: FRACTIONS

Sub Topic: **Subtraction of fractions with the same denominators**

Examples

1. Subtract $\frac{2}{5}$ from $\frac{4}{5}$

Solution

$$= \frac{4}{5} - \frac{2}{5}$$

$$= \frac{4-2}{5}$$

$$= \frac{2}{5}$$

2. What number must be added to $\frac{5}{11}$ to make $\frac{9}{11}$?

Solution

$$= \frac{9}{11} - \frac{5}{11}$$

$$= \frac{9-5}{11}$$

$$= \frac{4}{11}$$

3. A girl had an orange. She gave away $\frac{3}{4}$ of it. What fraction remained?

Solution

$= 1 - \frac{3}{4}$

$= \frac{4}{4} - \frac{3}{4}$

$= \frac{4-3}{4}$

$= \frac{1}{4}$

She remained with $\frac{1}{4}$ of an Orange

NB We can also consider the un-shaded Part in the diagram.

OR $1 - \frac{3}{4} = \frac{4}{4} - \frac{3}{4}$

$\frac{1}{4}$ (Un shaded part)

∴ She remained with $\frac{1}{4}$ of an orange.

Activity

Work out the following numbers

1.	Subtract: $\frac{4}{5} - \frac{2}{5}$	2.	Subtract: $\frac{2}{7}$ from $\frac{5}{7}$
3.	Work out: $\frac{4}{15} - \frac{2}{15}$	4.	I read $\frac{2}{5}$ of a Mathematics book. What fraction was left?

5.	A water tank was $\frac{7}{8}$ full. We used $\frac{4}{8}$ of the water. What fraction was left?	6.	What must be added to $\frac{5}{11}$ to make $\frac{9}{11}$?

Note:

- **You must follow the examples properly to work out the questions above correctly.**
- **Always read and understand before answering.**

Sub Topic: <u>Addition of fractions with different denominators</u>

<u>Examples</u>

1. Add: $\frac{1}{2} + \frac{1}{3}$

Use equivalent fractions

<u>Solution</u>

$= \frac{1}{2} = \{ \frac{1}{2}, \frac{2}{4}, \frac{3}{6}, \frac{4}{8}, \frac{5}{10}, \ldots \}$

$= \frac{1}{3} = \{ \frac{1}{3}, \frac{2}{6}, \frac{3}{9}, \frac{4}{12}, \frac{5}{15}, \ldots \}$

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

$= \frac{3}{6} + \frac{2}{6}$

$= \frac{3+2}{6}$

$= \frac{5}{6}$

2. Add: $\frac{2}{5} + \frac{1}{4}$

First get the L.C.M of 5 and 4

$M_5 = \{ 5, 10, 15, 20, 25, 30, \ldots \}$

$M_4 = \{ 4, 8, 12, 16, 20, 24, \ldots \}$

L.C.M = 20

<u>Multiply each fraction by the L.C.M</u>

$\frac{(2 \times 20^{4}) + (1 \times 20^{5})}{5_{1} \quad 4_{1}}$

$\frac{}{20}$

$= \frac{(2 \times 4) + (1 \times 5)}{20}$

$= \frac{8 + 5}{20}$

	You keep on adding the same numerator and denominator to the next fraction until you get two fractions with the same denominator		$= \frac{13}{20}$ You can also get the L.C.M using the ladder method.
Activity **Work out the following fractions by adding.**			
1.	$\frac{1}{3} + \frac{1}{4}$	2.	$\frac{2}{5} + \frac{1}{4}$
3.	$\frac{3}{5} + \frac{1}{4}$	4.	$\frac{6}{7} + \frac{2}{3}$

5.	$\frac{3}{4} + \frac{2}{8}$ **N.B <u>choose the simplest method to get the L.C.M</u>**		
Sub Topic: <u>subtraction of fractions with different denominations</u> <u>Examples</u>			
1.	Subtract: $\frac{3}{4} - \frac{2}{3}$ **<u>Solution</u>** $= \frac{3}{4} = \{\frac{3}{4}, \frac{6}{8}, \frac{9}{12}, \frac{12}{16}, \ldots\}$ $= \frac{2}{3} = \{\frac{2}{3}, \frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \ldots\}$ $= \frac{3}{4} - \frac{2}{3}$ $= \frac{9}{12} - \frac{8}{12}$ $= \frac{9-8}{12}$	2.	Work out $\frac{3}{7} - \frac{1}{3}$ **Use multiples to get the L.C.M** $M_7 = \{7, 14, 21, 28, \ldots\}$ $M_3 = \{3, 6, 9, 12, 15, 18, 21, \ldots\}$ **L.C.M = 21** **<u>Multiply each fraction by the L.C.M</u>** $\frac{(\frac{3}{1} \times 21) - (\frac{1}{1} \times 21)}{21}$ $= \frac{(3 \times 3) - (1 \times 7)}{21}$ $= \frac{9 - 7}{21}$

	$= \frac{1}{12}$		$= \frac{2}{21}$ **N.B Follow the steps as given in addition.**

Activity

Work out the following fractions

1.	$\frac{3}{4} - \frac{2}{3}$	2.	$\frac{2}{3} - \frac{1}{2}$
3.	$\frac{3}{6} - \frac{2}{4}$	4.	$\frac{3}{4} - \frac{1}{3}$
5.	$\frac{4}{5} - \frac{2}{3}$		