OUTREACH SCHOOLS EXAMINATIONS BOARD KAMPALA
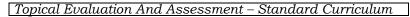
PRIMARY FOUR MATHEMATICS
SPECIAL TOPICAL QUESTIONS
PRIMARY FOUR-2024
SERIE 1

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

$= \mathbf{1} - \dfrac{3}{4}$

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

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

$= \dfrac{1}{4}$

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

OR $\mathbf{1} - \dfrac{3}{4} = \dfrac{4}{4} - \dfrac{3}{4}$

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

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

$\therefore$ She remained with $\dfrac{1}{4}$ of an orange.

Activity
Work out the following numbers

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

PREPARED BY OSEB KAMPALA   Authors Of **OSEB Ex aminations** And Other Educational Materials (lesson notes, schemes of work, packages, question banks, weekly   homework and special sets for P.7

2

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> = $\frac{1}{2}$ = { $\frac{1}{2}$, $\frac{2}{4}$, $\frac{3}{6}$, $\frac{4}{8}$, $\frac{5}{10}$, . . .} = $\frac{1}{3}$ = {$\frac{1}{3}$, $\frac{2}{6}$, $\frac{3}{9}$, $\frac{4}{12}$, $\frac{5}{15}$, . . .} = $\frac{1}{2}$ + $\frac{1}{3}$ = $\frac{3}{6}$ + $\frac{2}{6}$ = $\frac{3+2}{6}$ = $\frac{5}{6}$	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, . . .} M_4 ={ 4, 8, 12, 16, 20, 24, . . .} **L.C.M = 20** <u>**Multiply each fraction by the L.C.M**</u> $(\frac{2}{5} \times 20)^{4} + \frac{1}{4} \times 20^{5}$ $\dfrac{5^1 \qquad\qquad 4_1}{20}$ = $\dfrac{(2 \times 4) + (1 \times 5)}{20}$ = $\dfrac{8 + 5}{20}$

= $\frac{13}{20}$

You keep on adding the same numerator and denominator to the next fraction until you get two fractions with the same denominator

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.	$\dfrac{3}{4}$ + $\dfrac{2}{8}$		

N.B choose the simplest method to get the L.C.M

Sub Topic: subtraction of fractions with different denominations
Examples

1. Subtract: $\dfrac{3}{4}$ - $\dfrac{2}{3}$

   Solution

   $= \dfrac{3}{4} = \{\dfrac{3}{4}, \dfrac{6}{8}, \dfrac{9}{12}, \dfrac{12}{16}, \ldots\}$

   $= \dfrac{2}{3} = \{\dfrac{2}{3}, \dfrac{4}{6}, \dfrac{6}{9}, \dfrac{8}{12}, \ldots\}$

   $= \dfrac{3}{4} - \dfrac{2}{3}$

   $= \dfrac{9}{12} - \dfrac{8}{12}$

   $= \dfrac{9-8}{12}$

2. Work out $\dfrac{3}{7} - \dfrac{1}{3}$

   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
   Multiply each fraction by the L.C.M

   $\dfrac{(\dfrac{3}{4} \times \overset{3}{\cancel{21}}) - \dfrac{1}{\cancel{3}} \times \overset{7}{\cancel{21}}}{21}$

   $= \dfrac{(3 \times 3) - (1 \times 7)}{21}$

   $= \dfrac{9 - 7}{21}$

5

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

Activity

Work out the following fractions

1.	$\dfrac{3}{4} - \dfrac{2}{3}$	2. $\dfrac{2}{3} - \dfrac{1}{2}$
3.	$\dfrac{3}{6} - \dfrac{2}{4}$	4. $\dfrac{3}{4} - \dfrac{1}{3}$

5. $\dfrac{4}{5} - \dfrac{2}{3}$