1. What is the reciprocal of $3\frac{1}{3}$?

2. Change $4\frac{3}{5}$ into an improper fraction.

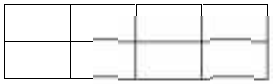
3. Change $\frac{3}{4}$ to decimal fraction

4. Work out $\frac{3}{5} + \frac{3}{4}$

5. Reduce $\frac{18}{24}$ to the lowest terms.

6. Simplify $\frac{3}{7} \div \frac{3}{5}$

7. Shade $\frac{3}{4}$ of the figure



8. Subtract: $\frac{2}{5}\ from\ \frac{3}{4}$

9. What must be added to $\frac{1}{3}\ to\ get\ \frac{2}{5}$?

10. Simplify $1\frac{1}{2} - \frac{3}{4}$

11. Find the next two equivalent fractions of $\frac{1}{3}$, ..., ...

12. What is $\frac{2}{5}\ of\ 60$?

13. Work out $\frac{1}{3} \div \frac{1}{12}$

14. How many $\frac{1}{4}\ kg$ packets of suar can be got from 30 kg ?

15. In a class of 60 pupils, $\frac{2}{5}$ of them are boys and the rest are girls.

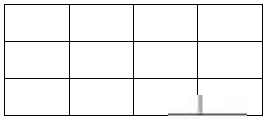
a) What is the fraction of girls?

b) How many girls are in the class?

16. Find the multiplicative inverse of $7\frac{1}{3}$

17. Peter shared $\frac{3}{5}$ of a sugarcane among his 5 friends. What fraction did each get?

18. Shade 0.5 of the figure below.



19. Arrange the following fractions in ascending order. $\frac{3}{4}, \frac{1}{5}$ and $\frac{5}{6}$

20. Write $\frac{5}{6}$ as a decimal fraction.

21. Simplify $\frac{3}{4} - \frac{1}{8}$

22. How many half litre cups are in a 20 litre jerrycan?

23. In a class of 60 pupils, $\frac{2}{5}$ of are girls and the rest are boys.

a) What is the fraction of girls?

b) How many more girls are there than boys?

24. A car broke after covering $\frac{2}{7}$ of the journey. If it had covered 60 km of the journey, how far was the jourey?

24. Simplify $\frac{1}{3} + \frac{1}{2} + \frac{1}{4}$

25. Simplify: $\frac{1}{2} \times \frac{2}{3} \div \frac{3}{4}$

26. Arrange: $\frac{3}{4}, \frac{1}{5}\ and\ \frac{5}{6}$ in descending order.

27. Simplify: $\frac{5}{6} \div \frac{3}{4}\ of\ \frac{3}{7}$

28. Simplify: $\frac{2}{3} - \frac{1}{4} \times \frac{2}{5}$

29. Work out: $\frac{1}{2} - \frac{1}{4} + \frac{1}{6}$

30. Simplify: $\frac{2}{3}\ of\ \frac{4}{5} + \frac{1}{2}$

31. Simplify: $\frac{2}{5}\ of\ \frac{3}{4} \div \frac{4}{5}$

32. Simplify: $\frac{3}{5}\ of\ [\frac{3}{7} - \frac{1}{3}]$

30. If $\frac{2}{3}$ of my salary is sh. 400,000. What is my salary?

31. Simplify: $5\frac{4}{10} - 3\frac{1}{2} + 2\frac{1}{4}$

32. Simplify: $3\frac{1}{2} - 1\frac{1}{4} + 3\frac{1}{8}$

33. $4\frac{1}{4} + \frac{1}{2} - 8\frac{1}{3}$

34. What is $\frac{6}{10}\ of\ \frac{3}{18}$

35. Jane ate $\frac{3}{10}$ of a sugarcane and Jacky ate $\frac{1}{8}$ of the sugarcane. The remaining sugarcane was eaten by Esther.
a) What fraction did Esther eat?

36. Mr. Bwete ate $\frac{3}{7}$ of a cake. What fraction remained?

37. In a class of 270 boys, $\frac{3}{4}$ are boys and the rest are girls.
a) What is the fraction of girls?
b) How many pupils are in the class?

38. In a club of 100 participants, 0.4 are males and the rest are females
a). Find the fraction of females
b). How many more males than females are there?

APPLICATION OF FRACTIIONS INVOLVING REMAINDERS

1. A lady spends $\frac{2}{5}$ of her salary on food and $\frac{1}{6}$ of the remainder on water and she saves the rest sh 70,000.

a) What fraction is saved?

b) How much does she earn as her salary?

2. A man spent $\frac{1}{4}$ of his salary on food and $\frac{1}{3}$ of the remainder on rent and saves sh 500,000.
a) What fraction does he save?

b) Find his monthly salary.

3. A man spent $\frac{1}{3}$ **of** hi salary on buying drinks and $\frac{1}{2}$ of it on buying food. If he spent **25%** of the remainder on rent and was left with Shs **60,000**.
a) How much was his salary?

4. A woman spends her salary as follows: $\frac{1}{4}$ on rent, $\frac{1}{3}$ on food, $\frac{1}{2}$ of the remainder on fees and saves the rest.
a) What fraction does he save?
b) If she spent Shs. 300,000 on fees, how much is her salary?

5. Out of a cake, Jim ate $\frac{2}{5}$, Jane ate $\frac{1}{3}$ and Peter ate the rest.
a) What fraction of the cake did Peter eat?
b) If Peter's portion weighed 20 grams, what was the total weight of the cake?

APPLICATION OF FRACTIONS INVOLVING TIME (TAPS)

1. Tap A can fill the tank in 6 minutes and tap B can fill the same tank in 3 minutes. How long will both taps take to fill the tank if they are opened at the same time?

2. Tap A takes 3 minutes to fill the tank and tap B takes 4 minutes to draw water from the tank. How many minutes will it take to fill the tank if both taps are left opened at the same time?

3. Tap K takes 6 minutes to fill a tank and tap L takes 36 minutes to fill the same tank but tap M takes only 9 minutes to empty the same tank. If all taps are opened at the same time, how many minutes will they take to fill the tank?

4. Tap **A, D** and **E** are connected together the tank. Tap **A** takes 12 minutes to fill the tank, tap **D** takes 24 minutes to fill the tank but tap **E** takes 16 minutes to draw water from the tank. If the tank holds 480 litres of water when full.
a) How many litres does tap **A** pours into the tank?
b) How many litres does tap **A** and tap **D** pour into the tank after one minute?

5. When tap **A** and tap **B** are opened at the same time, they fill the tank in 6 minutes. If tap **B** is turned on alone, it fills the tank in 8 minutes. How long will tap **A** take to fill the tank alone?

6. Amos can dig a garden in 8 days and Peter can dig the same garden in 10 days.
a) What fraction of the garden can they dig in one day if both work together?

APPLICATION OF FRACTION INVOLVING CAPACITY

1. A tank was $\frac{5}{7}$ full. When 220 litres were drawn, it remained $\frac{2}{5}$ full. Find the capacity of the tank?

2. A tank was $\frac{2}{5}$ full of water. When 60 litres were added the tank became $\frac{11}{15}$ full.
a) How many litres does the tank hold when full?
b) How many litres does it hold when three quarters full?