



## **TOPIC: FRACTIONS**

- 1. A teacher deposited sh. 72,000 in a bank. After one year, the teacher earned a simple interest of sh. 3,600. Calculate the simple interest rate of the bank. (PLE 2019 number 15)
- 3. Work out:  $\frac{2.4 \times 0.5}{0.12}$  (PLE 2019 number 22a)

- 2. A shopkeeper bought 19 plate at sh 34,200. At what price must the shopkeeper sell each plate in order to raise a profit of sh 3,800? (PLE 2019 number 19)
- 4. Simplify: 0.37 1.03 + 2.6 (PLE 2019 number 22b)

5. Kizza went to a market with sh. 30,000. She bought the items shown in the table below. After paying for all the items, she remained with sh. 9,250. (PLE 2019 number 26)

Complete the table.

Item	Unit cost	Total cost
2 kg of sugar	Sh 4,000 per kg	Sh
3 loaves of bread	Shper loaf	Sh
litres of milk	Sh 1,500 per litre	Sh 2,250
Total Expenditure		Sh





6. The number of goats, cows and sheep on a certain farm are in the ratio of 4:3:5 respectively. There are 40 more sheep than goats on the farm. Find the number of each type of animal on the farm. (PLE 2019 number 29).

7. Given that 1 US Dollar (US\$)
Costs Uganda shillings Ush. 3,672 and
1 Kenya shilling (Kshs) costs Ush. 36,
Find the cost of 1 US Dollar in Kenya
shilling. (PLE 2018 number 16).









## 8. Study and complete the table below. (PLE 2018).

Item	Quantity	Unit cost	Amount
Sugar	3 kg	Shper kg	Sh.14,000
Rice	kg	Sh 5,000 per kg	Sh.2,500
Milk	250 ml	Sh 3000 per litre	Sh
Biscuits	2 packets	Shper packet	Sh
Total expenditure			Sh.29,650

9. The taxi fare from Kampala to Mukono was raised by  $16\frac{2}{3}$  %. The old fare sh.3000. Find the new taxi fare. (PLE 2018 number 18).







10. A car uses 7 litres of petrol to cover 28 kilometers. How many litres of petrol can it use to cover 64 kilometres? ( PLE 2018 number 7 ).

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- 12. Joyce peter and Hannah shared pencils in a ratio of 3:5:7 respectively.
- (a) If Hannah got 12 more pencils than Joyce, how many pencils did they share altogether? (PLE 2018 number 29).

- 11. Express  $\frac{4}{15}$  as a recurring decimal. (PLE 2018 number 22a).
- (b) Find the number of pencils peter got?



- 13. Simplify:  $\frac{1}{2} \div \frac{1}{4}$  ( PLE 2000 number 13 )
- 16. Work out:  $\frac{2}{3} \frac{1}{2}$ ( PLE 2000 number 13 )

- 14. Express  $\frac{3}{4}$  as a decimal fraction. (PLE 1999 number 17).
- 17. Work out:  $\frac{1}{4} \frac{1}{8}$  ( PLE 2001 number 13 )

15. Subtract:  $\frac{1}{2} - \frac{1}{4}$  ( PLE 1999 number 7 ).

18. Work out:  $\frac{1}{4} + \frac{3}{5}$  ( PLE 2002 number 27 )



- **19. Divide:**  $\frac{2}{3} \div \frac{1}{3}$  (PLE 2003 number 27)
- 22. Work out:  $\frac{1}{2} \div \frac{3}{4}$  ( PLE 2005 number 7 )

- **20.** Simplify:  $\frac{1}{2} + \frac{1}{4} \frac{1}{3}$  (PLE 2003 number 24 ).
- 23. Work out:  $\frac{2}{3} \times \frac{9}{10}$

21. Work out:  $1\frac{1}{2} - \frac{3}{4}$  ( PLE 2004 number 11 ).

24. Work out:  $1\frac{1}{2} - \frac{5}{6}$  ( PLE 2007 number 24 )

- **25. Divide:**  $\frac{3}{9} \div \frac{1}{18}$  (PLE 2008 number 25)
- 28. Work out:  $\frac{5}{12} \div \frac{5}{9}$  ( PLE 2010 number 21 )

26. Simplify:  $2\frac{1}{2} - \frac{1}{4}$ (PLE 2009 number 17).

29. Work out:  $\frac{3}{4} + \frac{1}{4}$ 

27. Work out:  $\frac{4}{7} - \frac{8}{21}$ ( PLE 2009 number 9 ).

30. Work out:  $3\frac{1}{3} \div 2\frac{1}{2} \times 2\frac{2}{5}$ ( PLE 2014 number 25b )

**31. Divide:** 
$$1\frac{2}{5} \div 1\frac{1}{2} \div 3\frac{1}{2}$$

**34. Work out:** 
$$\frac{14}{15} \div \frac{2}{5}$$
 ( PLE 2015 number 7 )

32. Work out: 
$$\frac{2}{5} \div 1\frac{1}{2}$$
 (PLE 2012 number 6 ).

35. Express 125g as a fraction of a kilogram.
(PLE 1998 number 5)

33. Work out:  $\frac{1}{6} \times \frac{3}{4}$  (PLE 2014 number 9).

36. A bus broke down after covering  $\frac{5}{7}$  of the journey. The remaining distance to complete the journey was 140km. How long was the journey?

(PLE 1998 number 29)







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37. Express  $\frac{3}{5}$  as a decimal fraction.

( PLE 1999 number 17 )

38. In Moshi primary school,  $\frac{3}{4}$ of the pupils who sat for primary leaving examinations passed. (PLE 1999 number 35a). a) If those who failed were 30, find the number of pupils who passed.

b) What percentage of the pupils failed the examination?

39. A tank is  $\frac{2}{3}$  full of water. When 600litres of water are added, the tank is  $\frac{5}{6}$  full. How many litres of water does it contain when it is  $\frac{3}{4}$  full? ( PLE 2000 number 9 )

40. How many  $\frac{1}{4}$  litre bottles can be filled from a 20 litre jerrycan of milk? ( PLE 2001 number 10 )





43. Mukasa's bicyle got spoilt



41. Okello had 30km still to cover after travelling  $\frac{3}{5}$  of the journey. How long was the journey? ( PLE 2001 number 23 )

after he had covered a distance of 20 km which was  $\frac{1}{4}$  of his journey. How long was the journey?

(PLE 2003 number 29)

- 42. A man spends  $\frac{1}{4}$  of his salary on food,  $\frac{1}{3}$  on clothing,  $\frac{1}{6}$ on fees,  $\frac{1}{12}$  on entertainment and 44. When  $\frac{1}{9}$  of the pupils in a banks the rest which is sh. 27,000 (PLE 2003 number 40a).
- a) What fraction of the salary does he bank?

class are absent, 32 pupils are present. Find the total number of pupils in the class.

( PLE 2004 number 39 )

b) How much money does he earn as salary?







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45. Shade  $\frac{2}{5}$  of the following diagram.

( PLE 2006 number 7 )



- 46. A primary school has a population of 1,080 pupils. Of these,  $\frac{3}{5}$  are girls and  $\frac{1}{4}$  of the boys are in upper primary classes. (PLE 2006 number 33).
- a) Find the number of boys in upper primary classes?

b) Express the number of boys in lower primary classes as a percentage of the whole school population.

47. In Corona Primary School,  $\frac{1}{3}$  of the pupils in P.7 like matoke.  $\frac{2}{5}$  of the remainder like rice. The rest of the pupils like posho. If those who like posho are 42, find the total number of pupils in p.7?

(PLE 2004 number 39)

48. Arrange the following fractions in order beginning with the biggest:  $\frac{1}{2}$ ,  $\frac{2}{3}$ ,  $\frac{3}{5}$  (PLE 2009 number 14)



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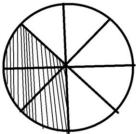


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49. What fraction of the circle is shaded?.

( PLE 2009 number 2 )



- 50. A certain county in Uganda had a population of 300,000 people. Of these people,,  $\frac{3}{\pi}$ were female and  $\frac{5}{6}$  of the female were girls. (PLE 2008 number 37a).
- a) If  $\frac{2}{3}$  of the males among the population are boys, find the ratio of boys to girls.

b) What is the total number of boys and girls in the county?

- 51. On a mixed farm,  $\frac{1}{2}$  of the land is used for growing food crops  $\frac{1}{4}$  of the remaining land is for cash crops. The rest of the land is for cattle grazing. ( PLE 2009 number 37 )
- a) What fraction of land is used for grazing?

b) If 15 hectares are used for cash crops, what is the total area of the farm?

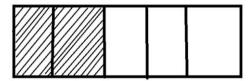
52. Arrange the following fractions in order beginning with the smallest:  $\frac{2}{7}$ ,  $\frac{2}{9}$  and  $\frac{1}{3}$ ( PLE 2011 number 28 )



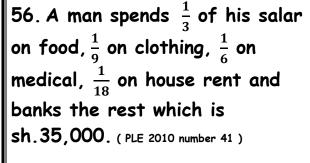




53. Write down the fraction of the shaded part of the drawing below. (PLE 2011 number 6)



54. In a P.7 class,  $\frac{2}{5}$  of the pupils are girls. If there are 150 pupils in the class, find the number of boys. (PLE 2010 number 29).



(a) What fraction of his salary does he bank?

55. Shade  $\frac{1}{2}$  of the diagram below. (PLE 2010 number 7)



b). How much money does he earn as salary?





57. In Jumbo Primary School,  $\frac{1}{4}$  of the pupils in P.7 like science,  $\frac{2}{3}$  of the remainder like Mathematics. The rest of the pupils like English. If those who like English are 33, Find the total number of pupils in P.7. (PLE 2012 number 27)

59.A tank was,  $\frac{2}{3}$  full of water. When  $\frac{1}{4}$  of the water in the tank was drawn, 2,250 litres remained. Find the capacity of the tank when full.

( PLE 2013 number 28 )

58. Medi has 30 kg of sugar to be packed in  $\frac{3}{4}$  kg packets. How many packets will he get? (PLE 2013 number 20).

60. A bucket is  $\frac{2}{3}$  full of water. When 4 litres are removed, it becomes  $\frac{1}{2}$  full of water. What is the capacity of the bucket? (PLE 2015 number 19)









61. In a class,  $\frac{1}{5}$  of the girls are boarders while  $\frac{1}{3}$  of the boys are day scholars. The percentage of girls in the class is 60%. The class has 10 boys who are day scholars (PLE 2017 number 31).

a)How many pupils are in the class?

62.Subtract 80.71 from 89.9 (PLE 2000 number 11)

63. Subtract 4.06 from 2.9 (PLE 2003 number 23)

b) Find the number of girls who are boarders.

64. Express 0.05 as a simplified fraction?

( PLE 2004 number 9 )







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65. Express 0.3 as a fraction.

( PLE 2008 number 5 )

68. Write 0.08 as a fraction in its simplest form.
(PLE 2012 number 12)

66. Round off 9.46 to the nearest tenth.

( PLE 2009 number 8 )

.

69. Round off 12.962 to the nearest thousands.

( PLE 2013 number 5 )

67. Work out: 2.0 + 0.5. (PLE 2011 number 11)

70. Express 0.406 in standard form. (PLE 2013 number 5)









## 71. Express the recurring decimal 0.5454... as a common fraction. (PLE 2016 number 23b)

73. Work out: ( PLE 2002 number 32 )

72. Express  $\frac{4}{15}$  as a recurring decimal. (PLE 2018 number 22a)

74. Simplify: ( PLE 2005 number 39a )





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**75. Simplify:**  $\frac{0.12 - 0.06}{0.06}$ .

77. Work out:  $\frac{0.25 \times 5.4}{0.045}$ 

**76.Work out:**  $\frac{2.7 \times 4.8}{2.4 \times 3.6}$  . (PLE 2007 number 41a )

78. Work out: (PLE 2011 number 39a)

 $\frac{0.28\,\times\,0.08}{1.4\,\times\!0.4}$ 



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79. Simplify:  $\frac{3.9 + 3.6}{0.06 \times 0.6}$ 

81. Arrange the following decimals in order beginning with the smallest: 0.11,0.5 and 0.03 (PLE 2010 number 25)

80. Work out:  $\frac{0.12 \times 5.4}{0.03 \times 0.6}$ 

. ( PLE 2016 number 23a )

82. Find the product of the value of 1 in the number 8.91 and the value of 3 in the number 368.4
(PLE 2005 number 30)







83. There are 45 pupils in a class. The ratio of the girls to the girls is 2:3. Find the number of girls in the class.

( PLE 1998 number 9 )

84. A parent gave exercise books to two sons and a daughter (James, Peter and Jane) in a ratio of 3:5:4 respectively. If Jane got 16 exercise books, how many exercise books did the parent give altogether?

(PLE 1999 number 37)

85. Okello divided his money among his daughters Anna, Babra and Christine in the ratio of 4:5:6 respectively. If Anna got sh. 600,000, find the amount of money that Okello had at the beginning.

( PLE 2000 number 34 )

86. In a class of 80 pupils, the ratio of boys to girls is 2:3. Find the number of girls.

( PLE 2001 number 22 )







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87. In a feed factory, crushed fish is mixed with maize floor in a ratio 1:3. The feed one packed in 80 kg bags.

( PLE 2002 number 36 )

(a) How many kilograms of fish are used in one bag of the feed?

(b) If one kilogram of maize flour costs sh.400. How much does it cost to buy maize flour to make feeds weigh 1000 kg.

88.In a class of 120 pupils, the ratio of boys to girls is 4:2. Find the number of boys.

( PLE 2003 number 28 )

89. A school has a total of 400 pupils. If there are 240 girls in the school, What is the ratio of boys to girls?

( PLE 2005 number 14 )







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90. In a school of 600 pupils, the ratio of boys to girls is 1:2. What is the number of girls in the school.

( PLE 2006 number 28 )

91. In a class, the ratio of girls to boys is 3:2. If there are 18 girls, how many pupils are in the class? (PLE 2013 number 13)

92. Gidudu has goats and sheep in a ratio of 3:2. If he has 24 goats, how many sheep does he have?

( PLE 2015 number 18 )

93. Joyce, Peter and Hannah shared pencils in a ratio of 3:5:7 respectively. (PLE 2018 number 29) (a) If Hannah got 12 more pencils than Joyce, how many pencils did they share altogether?

(b) Find the number of pencils Peter got?







94. The cost of 6 books is sh. 4500. What is the cost of 9 books? (PLE 1998 number 7)

96.A wheel of a bicycle makes  $1\frac{1}{2}$ Revolutions to cover 2 metres. How many revolutions will it make to cover a 120 metres. (PLE 1998 number 28)

95. 6 men take 10 hours to weed a garden of cassava. How long will 4 men working at the same rate take to weed the same garden? (PLE 1998 number 24)

97. In an hour, a watch loses 5 seconds. In how many hours will it lose 2 minutes? (PLE 1999 number 26)







98. A tap was opened for 5 minutes and water of 40 litres poured into a tank. How long would it take to fill a tank whose capacity is 1080 litres using the same tap?(give your answer in hours) (PLE 1998 number 33)

100.A tank contains 3,000 litres of water. A tap opened and release water at a rate of 10 litres per minute. How long will it take for the tank to become completely empty?

(PLE 1998 number 28)

99. Mapeera bought 4 exercise books at sh.800. How much would he pay for 8 similar exercise books? (PLE 1999 number 26)



















