TIME: 2:00 HOURS
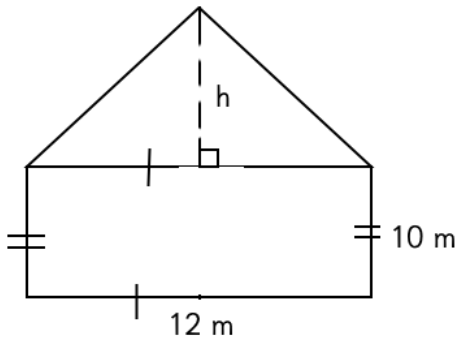
SECTION A: MATHEMATICAL OPERATIONS, FIGURES AND WORD PROBLEMS

1. Which is the next number in the following sequence? 29, 33, 37, 41, _____
   a. 43   b. 45   c. 47   d. 42   e. 46

2. The length of a football pitch is 90.136 metres and the length of a netball pitch is 30.769 metres. Write the difference of pitches into two decimal places.
   a. 60.63   b. 59.34   c. 60.37   d. 59.37   e. 59.36

3. Akilimali fell down after running for $^3/_4$ of an hour. What percentage of time remained to complete an hour?
   a. 75%   b. 0.25%   c. 25%   7.5%   2.5%

4. Mr. Mandela has a farm of a circular shape with a diameter of 35 metres. If he decides to plant trees around the farm at a distance of 2.2 metres apart from each other, how many trees will he plant around the whole farm? $\pi = \frac{22}{7}$
   a. 110   b. 242   c. 77   d. 51   e. 50

5. A doctor attended the patients in two days. On Monday, he attended 81 patients and on Tuesday he attended 69 patients. What is the fraction of patients who were attended on Monday?
   a. $\frac{23}{50}$ b. $\frac{23}{27}$ c. $\frac{29}{50}$ d. $\frac{24}{50}$ e. $\frac{4}{27}$

6. Rehema and Fadhili started at once counting oranges. Rehema counted loudly after every 5 oranges and Fadhili after every 9 oranges. Which first common number will they count loudly?
   a. 14   b. 4   c. 45   d. 90   e. 54

7. The tank of Baker's motorcycle was filled with 24 litres of oil. If it will travel a distance of 10 km and use $\frac{5}{8}$ of the oil, how many litres of oil will remain?
   a. 15   b. 34   c. 9   d. 25   e. 14

8. A bus has 23 seats, two of them are for the driver and conductor and $^2/_3$ of the remaining seats are for the passengers. How many seats are empty in the bus?
   a. 21   b. 14   c. 16   d. 7   e. 9

9. Five pupils were given a task of listing all multiples of 6 between 30 and 60. Which list is correct?
   a. 36, 48, 54, 56   b. 36, 42, 54, 60   c. 36, 40, 42, 48   d. 36, 48, 54, 60
      e. 36, 42, 48, 54

10. Ester calculated the product of all prime numbers between 80 and 90 correctly. Which one is the correct list?
    a. 7,387   b. 7,378   c. 7,367   d. 7,373   e. 7,396

11. Five groups listed all even numbers between 115 and 124. Which group listed the numbers correctly?
    a. 116, 120, 122, 124   b. 116, 118, 120, 122   c. 116, 119, 120, 122
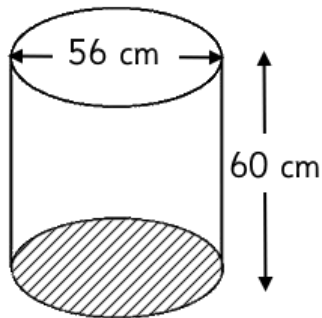   d. 116, 118, 120, 124   e. 116, 120, 123, 124

12. The students were given an exercise of arranging the numbers 1.25, 20%, $\frac{1}{8}$, 0.15 and – 3 in a descending sequence. Which sequence is correct?

   a. 1.25, $\frac{1}{8}$, - 3, 0.15, 20%

   b. – 3, 1.25, 0.15, 20%, $\frac{1}{8}$

   c. – 3, 20%, 1.25, $\frac{1}{8}$, 0.15

   d. 1.25, 20%, 0.15, $\frac{1}{8}$, - 3

   e. 1.25, - 3, 20%, 0.15, $\frac{1}{8}$

13. Mwanahawa deposited 450,000 shillings in a bank for a period of 2 years and she got an interest of 27,000 shillings. What is the rate of interest given by the bank?

   a. 2%   b. 3%   c. 4%   d. 5%   e. 1%

14. Ushindi primary school has a total of 960 pupils. If there are 540 girls, what fraction represents the number of boys?

   a. $\frac{9}{16}$ b. $1\frac{7}{16}$ c. $\frac{7}{16}$ d. $\frac{3}{4}$ e. $1\frac{9}{16}$

15. Mariam's mother had 100 kilograms of rice. She gave Elisha $\frac{3}{10}$, Mwajuma $\frac{1}{2}$ and Isaac $\frac{1}{5}$ of all amount of rice. How many kilograms did a person with the smallest share get?

   a. 30   b. 40   c. 70   d. 20   e. 10

16. Musa ate $\frac{1}{9}$ of bread and Amina ate $\frac{1}{8}$ of the same bread. What fraction of the bread did they remain with?

   a. $\frac{55}{72}$ b. $\frac{2}{17}$ c. $\frac{15}{17}$ d. $\frac{17}{72}$ e. $\frac{15}{72}$

17. Sabrina and Salma got a profit from their joint business. Sabrina received $\frac{3}{5}$ of the profit and Salma received 0.4 of the profit. Find the difference of the amount received in percentage?

   a. 60%   b. 40%   c. 30%   d. 80%   e. 20%

18. Upendo travelled a distance of $16^3/_4$ kilometres by bicycle and the remained part she walked on foot. If she travelled a distance of $18^1/_2$ kilometres, what distance did she walk on foot?

   a. $2^3/_4$ km   b. $1^3/_4$ km   c. $3^1/_4$ km   d. $2^1/_4$ km   e. $1^1/_2$ km

19. Uhuru Primary School had 80 cattle. Last year the school decided to sell $\frac{5}{8}$ of the cattle. How many cattle did the school remain with?

   a. 50   b. 48   c. 32   d. 10   e. 30

20. An electric company uses 5,500 litres and 760 millilitres of diesel every day to produce an adequate amount of electricity needed at Wazalendo village. How much diesel should be used in February of a short year to satisfy the needs of the village?

   a. 154,021 litres and 280 millilitres

   b. 170,523 litres and 560 millilitres

   c. 165,022 litres and 800 millilitres

   d. 154,021 litres and 250 millilitres

e. 159,522 litres and 40 millilitres

21. Juma is shorter than Amina by 0.32 metres. If the height of Amina is 1.51 metres, what is the height of Juma?

a. 1.83 m   b. 1.29 m   c. 1.81 m   d. 1.19 m   e. 1.18 m

22. A father bought 57 sacks of beans and each sack weighed 90 kilograms. What was the cost of all the sacks of beans if he bought each kilogram for 380 shillings?

a. Sh 40,040   b. sh 15,390   c. sh 34,200   d. 21,660   e. sh 55,860

23. Jane's income for the year 2019 was 42,000,000 shillings. She used 8,500,000 to pay school fees for her children, 12,000,000 shillings to pay for construction expenses and 10,000,000 shillings for personal expenses. If she saved the remained amount, how much money did she save?

a. Sh 11,500,000   b. sh 30,000,000   c. sh 35,500,000   d. sh 3,500,000
e. sh 72,000,000

24. Muungano group had 8 members. They did a business and got a profit of 8,892,000 shillings. If they divided the profit equally among themselves, how much money did each one get?

a. Sh 1,407,000   b. sh 1,704,000   c. sh 174,000   d. sh 1,074,000
e. sh 1,174,000

25. Panju, Bakari and Amina shared 900,000 shillings as follows: Panju got twice amount of Bakari and Amina got three times the amount of Panju's share. If Amina got a total of 600,000 shillings, how much money did a person with the smallest share get?

a. Sh 400,000   b. sh 50,000   c. sh 100,000   d. sh 200,000
e. sh 300,000

26. Mwajuma bought the following items: 5 kg of rice @ 2,200 shillings, 3 kg of beans @ 2,300 shillings and 4 kg of sugar @ 2,600 sh. If Mwajuma had 50,000 shillings, how much money did she remain with after the purchases?

a. Sh 31,700   b. sh 21,700   c. sh 28,300   d. 22,700   e. sh 23,700

27. Mwajuma deposited the amount of 564,000 shillings in a bank, which gives an interest rate of $5\frac{1}{2}$% per year. What is the amount of interest did she get after 6 months?

a. Sh 14,100   b. sh 18,612   c. sh 15,520   d. sh 15,510   e. sh 18,513

28. A businessman deposited 8,000,000 shillings in a bank which offers 8% of interest per year. After how many years would the interest be 1,600,000 shillings?

a. 2   b. $2\frac{1}{2}$ c. 3   d. 4   e. $5\frac{1}{2}$

29. The following diagram shows a wall of one of the buildings of Songambele Primary School. Find the value of h if the area of the wall is 192 m².
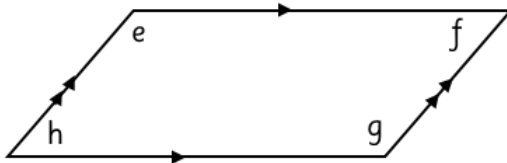
12 m

a. 10 m   b. 12 m   c. 15 m   d. 8 m   e. 6 m

30. The following figure represents a tank whose diameter is 56 cm and height is 60 cm. Find the area of its surface if the tank is open on one side. $\pi = \frac{22}{7}$

a. 13,024 cm²   b. 11,264 cm²   c. 13,728 cm²   d. 10,264 cm²   e. 9,064 cm²
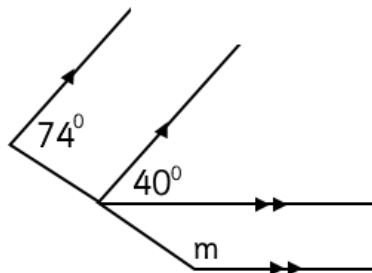
31. A pupil measured the interior angles of a parallelogram and named them as angles e, f, g and h as shown in the following figure:

Which angles are equal?

a. e and f   b. h and e   c. h and g   d. h and f   e. g and f

32. A teacher drew the following figure and asked pupils to find the value of angle m. what is the value of angle m in degrees?
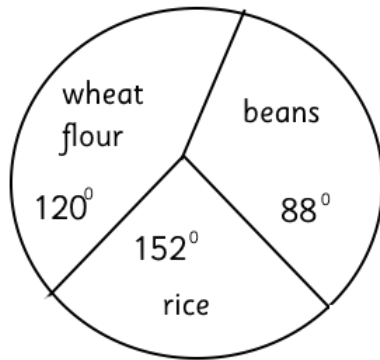

a. 114⁰   b. 34⁰   c. 140⁰   d. 106⁰   e. 146⁰

33. A rabbit weighs 4 kg 21 dag 48 dg. How many rabbits will weigh 50 kg 57 dag 76 dg?

a. 22   b. 17   c. 12   d. 7   e. 20

34. Opio walked a distance of 42 dam 25 dm 8 cm in the morning and 12 dam 10 dm 7 cm in the evening. Find the total distance he walked in centimetres.
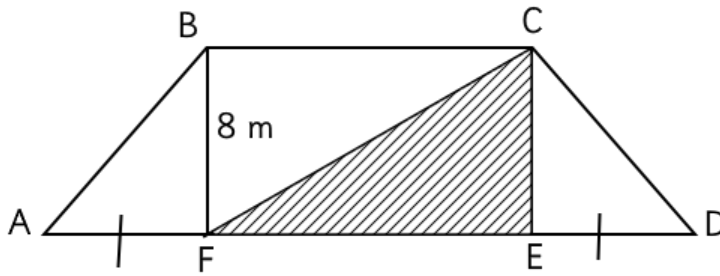
a. 104 cm   b. 54,365 cm   c. 5,765 cm   d. 5,450 cm   e. 54,050 cm

35. 48 litres 450 millilitres of milk were equally shared by three families of 6 people each. What amount of milk did each family get?

a. 16 litres 15 millilitres   b. 150 litres 16 millilitres   c. 8 litres 75 millilitres
d. 16 litres 150 millilitres   e. 15 litres 16 millilitres

36. One tonne of beans was distributed among 16 women. If all women received an equal share, how much did everyone get?

a. 62 kg 50 g   b. 62 kg 50 dag   c. 62 kg 500 dg   d. 62 kg 5,000 mg
e. 62 kg 500 hg

37. A train moves 720 km per hour. How is this speed written in centimetres per second?

a. 20,000 cm/sec   b. 2,000 cm/sec   c. 12,000 cm/sec   d. 1,200 cm/sec
e. 200 cm

38. If n + 5 = 0, what will be the value of the expression: $\frac{(2n+3) \div (1-4n)}{2-n}$?

a. $\frac{1}{21}$ b. $-\frac{1}{21}$ c. $\frac{7}{133}$ d. $-\frac{7}{133}$ e. $-\frac{1}{19}$

39. The following pie chart shows the amount of food which were sold per week in a wholesale shop.

If 300 kilograms of wheat flour were sold for the whole week, how many kilograms of rice were sold?

a. 900   b. 600   c. 380   d. 220   e. 152

40. The average weight of six pupils of standard seven is 48 kilograms. If the weight of the seventh pupil is added the average will be 50 kilograms. Find the weight of the seventh pupil.

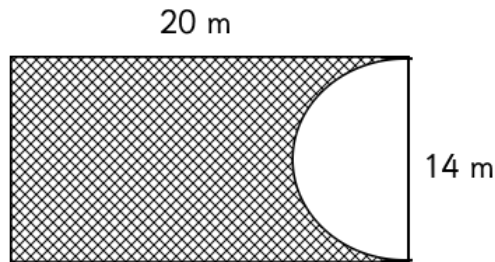a. 50 kilograms   b. 49 kilograms   c. 62 kilograms   d. 18 kilograms
e. 98 kilograms

SECTION B: MATHEMATICAL OPERATIONS, FIGURES AND WORD PROBLEMS

41. A school has the area of 240 m² and its length is 15 m. What is the square root of the width of the school's area?

42. A school owns an onion garden which is in trapezium shape ABCD as shown in the following figure:

If the area of the shaded region is 48 m² and the length AF is 6 m, find the area of the whole garden

43. In the following figure, the shaded region represents the area of a farm that is grown onion.

Find the area of the part that is grown onions. $\pi = \frac{22}{7}$

44. If a Mathematics lesson takes a period of 40 minutes, how many periods of that lesson will be taught from 8:00 a.m. to 9:20 a.m.?

45. Musa deposited sh 450,000 in a bank which offers an interest of 4¹/₂% per year. What is the amount of interest did he get in 8 months?