NYERI COUNTY
STD 7 - TERM 3
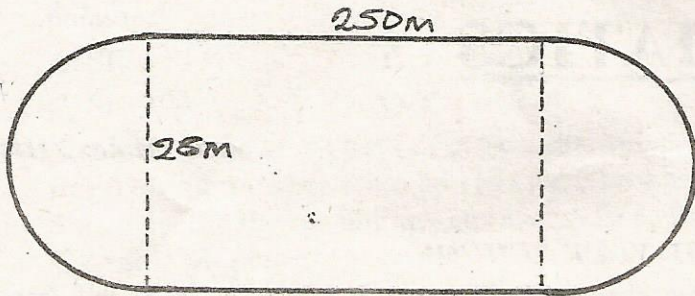## MATHEMATICS

READ THESE INSTRUCTIONS CAREFULLY   *Time: 2 Hrs*
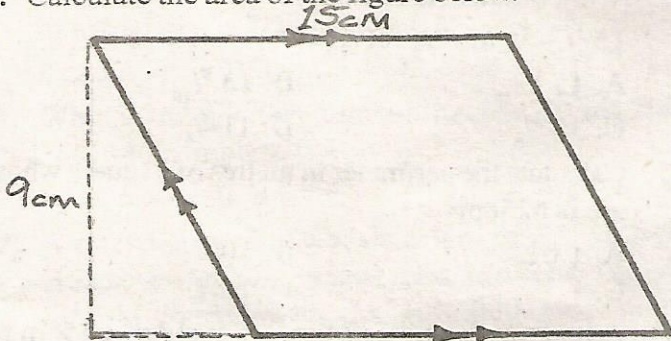
1. *Use only an ordinary pencil.*
2. *Make sure that you have written on the answer sheet:-*
   (I) *YOUR NAME*   (II) *NAME OF YOUR SCHOOL*
3. *For each question show the correct answer by drawing line in the brackets in which the letter you have chosen is written.*

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1. Write seventy seven million, six hundred and six thousand, nine hundred and nine in figures?
   A. 77, 666, 999   B. 70, 706, 909
   C. 77, 606, 909   D. 7, 606, 900

2. What is the difference between the total value of digit 3 in 6293850 and the total value of digit 6 in 455648?
   A. Two thousand four hundred.
   B. Three thousand six hundred.
   C. 33060
   D. 3000

3. What is the value of:-
   $(8 \div {}^1/_4) - 3 \div 1 {}^1/_2)$
   A. 30
   B. 32
   C. $27 {}^1/_2$
   D. $10 {}^2/_3$

4. A tailor had a piece of cloth of length 1.863m. She made clothes of equal pieces of 0.99 metres. How many clothes did she make to the nearest whole number.
   A. 1.9   B. 2
   C. 1.83   D. 1

5. A certain matatu company has a total of 80 vehicles. The number of pick-ups is half the number of lorries. The number of saloon cars is 20 less than the number of pick-ups. How many lorries are there?
   A. 50   B. 40
   C. 100   D. 25

6. What is the next number in the sequence
   13, 17, 19, 23, _____
   A. 25   B. 29
   C. 28   D. 31

7. Work out the value of :
   $15 {}^1/_2 - {}^2/_3$ of $({}^2/_5 + 1 {}^1/_4 \div {}^5/_8)$
   A. $17 {}^{17}/_{30}$ B. $13 {}^9/_{10}$
   C. $35 {}^3/_5$ D. $11 {}^5/_6$

8. Calculate the perimeter in metres of a square whose are is 625cm²
   A. 1.01   B. 100
   C. 1   D. 1.02

9. A rectangular piece of metal measures 4.2 m by 3.5m. Calculate its area in square centimetres.
   A. 147,000cm²
   B. 157,000cm²
   C. 14.7cm²
   D. 14.7m²

10. Work out
    $$\frac{0.168 \times 9.6}{33.6}$$
    A. 4.8   B. 0.0048
    C. 0.48   D. 0.048

11. Kinuthia cycled at an average speed of 10m/s. What was his speed in km/h?
    A. 18km/hr   B. 36m/s
    C. 36km/hr   D. 18 m/s

12. Using a ruler and a pair of compasses, construct triangle KLM, where line KL = 4.5 cm, $\angle$ LKM = 90° and $\angle$ KML = 30°. Measure line MK.
    A. 8.2cm   B. 7.8cm   C. 7cm   D. 9cm

13. A worker spends ${}^3/_5$ of his salary on food, ${}^1/_8$ on clothing, ${}^1/_4$ on other expenses and saves the rest. What fraction of his salary does he save?
    A. ${}^1/_{40}$ B. ${}^{39}/_{40}$
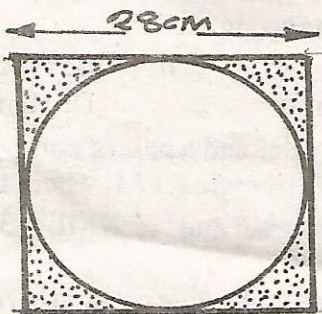   C. ${}^3/_4$ D. $1 {}^1/_4$

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14. What is the total distance covered by a runner who runs around the field below one and a quarter times?

250M

26M

A. 735m   B. 588m   C. 147m   D. 500m

15. Calculate the area of the figure below.

15cm

9cm

A. 65cm   B. 135cm   C. 65cm²   D. 135cm²

16. Maina's ranch is trapezium in shape. Find its area in hectares if two of its sides measures 500m by 600m and its perperndicular height is 400m.

A. 22ha   B. 220ha
C. 220,000ha   D. 30,0000ha

17. A matatu left Nairobi at 8.05 a.m. It took three and a quarter hours to reach Mawingu. At what time in 24hr did it arrive at Mawingu?

A. 1240hrs   B. 1115hrs
C. 2320hrs   D. 1120 hrs

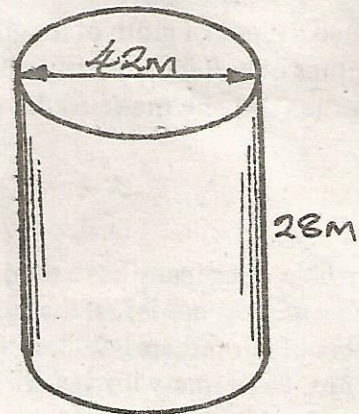18. Calcualte the area of the shaded part in the figure below.

28cm

A. 168   B. 7.84   C. 1.68   D. 6.16

19. The temperature of water in the afternoon was 20⁰C. If it was 14⁰C in the morning, what was the rise in temperature?

A. 14⁰C   B. 34⁰C   C. -4⁰C   D. 4⁰C

20. A cow was tied on a peg with a rope of 35m. What is the greatest area the cow grazed.
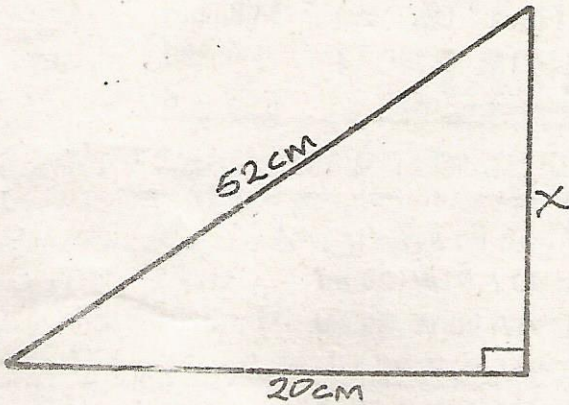(Use $\pi = ^{22}/_7$)

A. 2110m²
B. 3850m²
C. 15400m²
D. 385m²

21. Convert $^3/_8$ to a decimal and write your answer to 2 decimal places.

A. 2.67   B. 0.37
C. 0.38   D. 0.375

22. Nyamathi bought the following items from Muki's shop.

Pullover for shs. 288.50

2 pairs of socks @ 160.00

2 shirts @ shs. 144.50

If he gave the shopkeepr one thousand   shillings note, what balance did he get?

A. 112.50
B. 897.50
C. 102.50
D. 753.00

23. Benson's family uses 5 litres of milk everyday. If they bought the milk from 10th Feb. to 11th May 2009, how many litres did they use altogether?

A. 90 litres   B. 91 litres
C. 450 litres   D. 455 litres

24. Find the volume of the cylinder below.
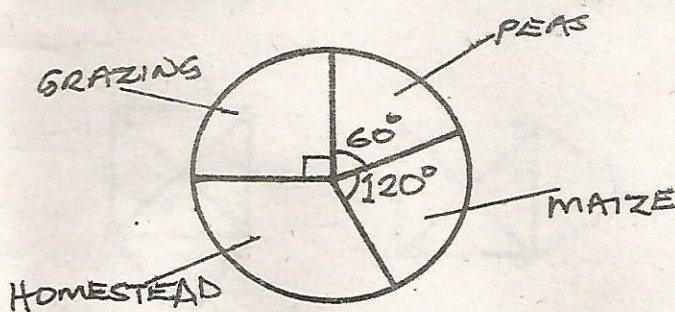

42M

28M

A. 388.08m   B. 13.2m³
C. 132m³   D. 388.08m³

25. The marked price of a pair of shoes was shs. 3000 John bought the pair of shoes at sh . 2400. What percentage discount did he get?

A. 20%   B. 80%
C. 60%   D. 24%

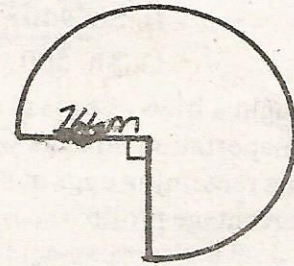26. In the figure below ∠ KLM = 90⁰. km = 52cm and ML = 20cm. What is the value of X?

A. 408cm   B. 72cm   C. 4.8cm   D. 48cm

27. A teacher bought 63 sweets and shared them between boys and girls in the ratio 4:3. How many sweets did the boys get?

A. 27   B. 36   C. 7   D. 9

28. If m = x + 5, x = 3 and n = m - x + 1

Work out:- $\dfrac{4(m + x)}{2n}$

A. 3 ¹/₃   B. 3 ²/₃   C. 11 ²/₃   D. 3

29. A train covered 540km of a speed of 60km/hr. Calculate the time taken by the train to complete the journey?

A. 8hrs   B. 6hrs   C. 9 hrs   D. 7hrs

30. What is the median in the following set of numbers.
450, 690, 287, 123, 845

A, 2395   B. 479   C. 287   D. 450

31. What is the square root of 14 ¹/₁₆

A. 3 ¹/₄   B. 4   C. 3 ³/₄   D. 2

32. Susan deposited shs. 60,000 in a bank that paid 12% interest per annum. How much interest did she get after 2 years?

A. 14,000   B. 1400   C. 2400   D. 14,400

33. Kamau divided his piece of land as shown below. If the part used for maize is 60ha. How many hectares was for grazing?
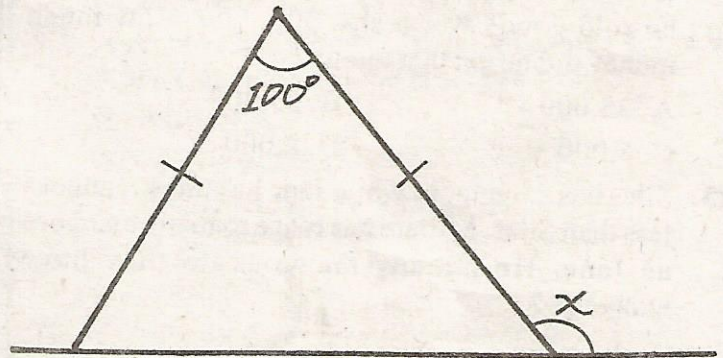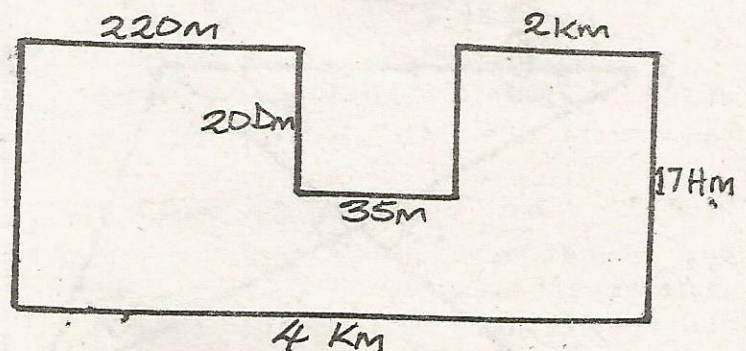

A. 45ha   B. 20ha   C. 450ha   D. 540ha

34. What is the area of the figure below in ares.

A. 61.6   B. 6.16
C. 0.88   D. 88

35. Round off the following number to the nearest tenths.
911967.15
A. 9119670   B. 911697.2
C. 911967.2   D. 911967.1

36. Find the value of angle x in the figure below

A. 140⁰   B. 100⁰
C. 40⁰   D. 80⁰

37. Work out the perimeter of the figure below in metres.

A. 9835m   B. 10055m
C. 10005m   D. 7435 m

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38. A trader bought 4 bags of potatoes each weighing 110kg. He later repacked them for sale in 100grams packet and sold each packet at shs. 50. How much money did the trader receive from the sale of potatoes?

A. Sh. 550   B. Sh. 440

C. Sh. 200   D. Sh. 500

39. Mrs. Kamau bought 4 trays of eggs at shs. 300 per tray. During transportation 30 eggs were broken. She later sold the remaining eggs at shs. 15 each. Calculate her percentage profit

A. $1\frac{1}{4}\%$ B. $12\frac{1}{2}\%$

C. 50%   D. 24%

40. Given the scale 1: 100000, find the drawing length of a road that is 5km long in cm.

A. 500km   B. 0.5km   C. 5km   D. 50km

41. What is the greatest number that can divide 200, 360, 480 completely.

A. 10   B. 40   C. 30   D. 25

42. A salesman is paid a basic salary of shs. 10,000. He also gets 5% of the total sales. In a certain month he sold goods worth shs. 500, 000. How much money did he get that month?

A. 35,000   B. 25,000
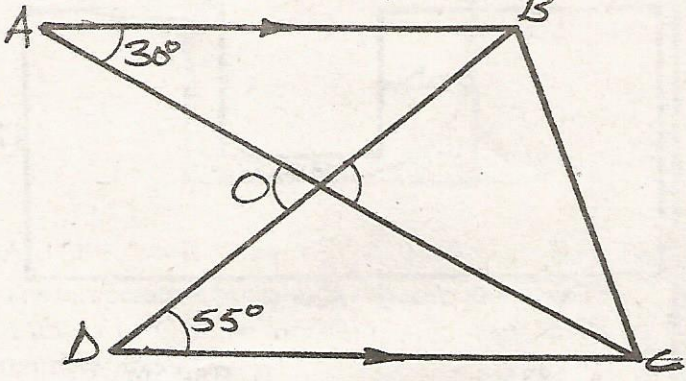
C. 5,000   D. 2,000

43. Silas has x mangoes while Jane has three mangoes less than Silas. Miriam has twice as many mangoes as Jane. How many mangoes do they have altogether?

A. 4x + 3   B. 3x - 6

C. 4x + 9   D. 4 x - 9

44. Add thirty six thousand, nine hundred and fifty eight to four hundred and twenty thousand and seven.

A. 456,965   B. 453,439

C. 400,453   D. 456,007

45. In the figure below, AB is parallel to CD, $\angle$ BAC = 30^0 and $\angle$ BDC = 55^0. Find $\angle$ AOB.

A. 90^0 B. 75^0 C. 85^0 D. 95^0

46. What is the reciprocal of $11\frac{1}{3}$

A. $\frac{34}{3}$ B. $\frac{33}{34}$ C. $\frac{3}{33}$ D. $\frac{3}{34}$

47. Work out

Litres	Decilitres	Millilitres
15	3	20
x		6

A. 90 *l* 91*dl* 20 *ml*

B. 91*l* 90 *dl* 20 *ml*

C. 91*l* 9 *dl* 20 *ml*

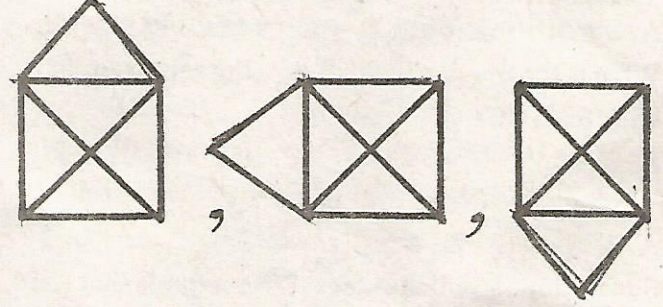D. 101 *l* 9 *dl* 20 *ml*

48. Simplify the expression

4 (x - 2y) + 3 (3x - 2y)

A. 12x - 10y   B. 13x - 10y

C. 13x + 10y   D. 13y - y

49. The cross - sectional area of a cuboid is 425cm². If the volume of the cuboid is 2550cm³. What is it's height?

A. 0.6cm   B. 6cm

C. 5 $\frac{1}{2}$cm   D. 4cm

50. Below is a pattern of triangle. What is the next pattern?

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