

NANDI COUNTY MOCK EXAMS

STANDARD 8 - YEAR 2019

MATHEMATICS

TIME: 2HRS.

READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this question paper and a separate answer sheet. The question paper contains 50 questions.
2. Do any necessary rough work in this paper.
3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in this question paper.

HOW TO USE THE ANSWER SHEET

4. Use an ordinary pencil only.
5. Make sure that you have written on the answer sheet.

YOUR INDEX NUMBER

YOUR NAME

NAME OF YOUR SCHOOL

6. By drawing a **dark line** inside the correct numbered boxes mark your full Index Number (i.e. School Code Number and the three-figure Candidate's Number) in the grid near the top of the answer sheet.
7. Do not make any marks outside the boxes.
8. Keep the sheet as clean as possible and do not fold it.
9. For each of the questions 1 - 50 four answers are given. The answers are lettered A, B, C, D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet the correct answer is to be shown by drawing a dark line inside the box in which the letter you have chosen is written.

Example:-

In the Question Paper:

23. Wanjiku had a piece of wood measuring 32.4m. She wanted to cut it into equal lengths measuring 0.4m. How many pieces did she get?

- A. 8.1
B. 81
C. 32.6
D. 28.4

The correct answer is (B) (81)

On the answer sheet:

8 [A] [B] [C] [D] 12 [A] [B] [C] [D] 17 [A] [B] [C] [D] 18 [A] [B] [C] [D] 23 [A] [B] [C] [D]

In the **Fifth** set, the box with the letter **B** printed in it is marked.

11. Your dark line **MUST** be within the box.
12. For each question **ONLY ONE** box is to be marked in each set of four boxes.

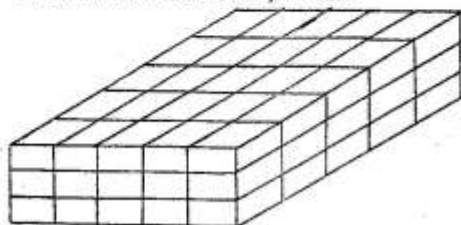
This Question Paper consists of 50 Printed Questions.

TURN OVER

- Which one of the following is a quarter of **1 101 100** in words?
 A. Two hundred and seventy five thousand, two hundred and seventy five
 B. Two hundred and seventy five, two hundred and seventy five
 C. One million one hundred and one thousand and one hundred
 D. Two hundred and fifty seven thousand two hundred and fifty seven
- The area of a square pieces of land is **0.64ha**. What is its perimeter?
 A. 320m
 B. 80m
 C. 6400
 D. 800m
- Find the value of:-

$$\frac{6.0 - 0.8 \times 0.5 + 1.25}{0.5}$$

 A. 8.7
 B. 18.2
 C. 6.45
 D. 13.7
- Which is the next number in the series $2\frac{1}{6}, 3\frac{1}{3}, 4\frac{1}{2}, \underline{\hspace{2cm}}$
 A. $5\frac{2}{3}$
 B. $4\frac{2}{3}$
 C. $5\frac{1}{3}$
 D. $6\frac{1}{6}$
- Jane had a piece of wood. It was a cube of side 9cm. He drilled a cylindrical hole of diameter 7cm. What was the volume of the solid left?
 A. 729cm^3
 B. 382.5cm^3
 C. 236.5cm^3
 D. 1075.5cm^3
- Karima primary has 990 pupils. The ration of boys to girls is 6 : 5. On a sport day, $\frac{3}{10}$ of the boys participated in various events. How many did not taken part?
 A. 162
 B. 315
 C. 540
 D. 378
- The figure below represents a stack of cubes. All its faces were painted.



- How many cubes were not painted at all?
- A. 9
 B. 25
 C. 55
 D. 66
- Gisharu borrowed sh 48.00 from a bank which charged compound interest at the rate of 15% per annum. What amount did the he pay by the end of two years?
 A. Sh. 62,400%
 B. Sh. 15.480
 C. Sh. 63,480
 D. Sh. 14,400
 - Draw triangle **XYZ** in which **XY = 8cm**, **YZ = 7cm**, **ZX = 6cm**. Draw a circle touching the three vertices. What is the radius of the circle?
 A. 1.9 cm
 B. 4.2cm
 C. 3.8 cm
 D. 8.4cm
 - Below is a table showing Wanjohi's sales of soft drinks in a given week.

Days of	Mon	Tue	Wed	Thur	Fri	Sat	Sun
No. of crates	10	12	11	14	10	8	5

- On which three consecutive days was the sales highest ?
- A. Thur, Fri, Sat
 B. Tue, Wed, Thu
 C. Wed, Thur, Fri
 D. Mon, Tue, Wed
- On a map whose scale is **1:10,000**, a plot of land rectangular in shape measures 7cm by 5cm. What is its actual area in ares?
 A. 35
 B. 350
 C. 3500
 D. 35000
 - Wangui is 5 times as old as Wariara. If Wangui is **x** old. Which of the following expressions show their total age in three years time?
 A. $1\frac{1}{5}x + 6$
 B. $6x + 6$
 C. $1\frac{1}{5}x + 3$
 D. $6x + 3$

13. A sales man is paid a salary of sh 5000 per month and a commission of 2% on his sales. In a certain month, he earned a total of Sh. 6 200 .What was the value of the goods he sold that months?

A. Sh. 350 000 B. Sh. 850 000
C. Sh. 7 000 D. Sh. 60 000

14. Gatheu bought the following :-

- 2kg of sugar @ sh. 52.00
- 2 loaves of bread for sh. 44.00
- 1 kg of meat 2 sh 140.00
- 4 bars of soap at sh. 44.00

If she gave the shopkeeper a five hundred shillings note. What was the balance?

A. Sh. 270 B. sh.230
C. Sh. 464 D. sh. 36

15. The figure below shows a circle inscribed in a semi-circle of diameters 14cm.



What is the area of the shaded part (Take π as $\frac{22}{7}$)?

A. 115.5 cm² B. 38.5 cm²
C. 154 cm² D. 77 cm²

16. Find the value of x in $x + 1 + \frac{x}{4} = 2$

A. $2\frac{1}{3}$ B. 2
C. $3\frac{1}{3}$ D. 0

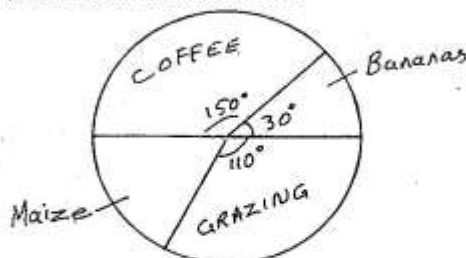
17. Katumbo's lorry carried 97 bags of chicken feed and 115 bags of maize germ. Each bag of chicken feed had a mass of 70kg and that of maize germ 50kg. What was the total mass of the load?

A. 12.54t B. 125.4t
C. 1254t D. 12540t

18. A tank can be filled with water by 5 taps in 14 hours. How long would it take 7 such taps to fill the same tank?

A. $5\frac{5}{7}$ h B. 10 h
C. $19\frac{2}{5}$ h D. $5\frac{2}{5}$ h

19. The pie - chart below shows how Cumari used his 36 hectares of land.



How many more hectares did he use for maize than for beans?

A. 7 B. 10
C. 3 D. 4

20. Using a ruler and a pair of compass, construct triangle PQR such that QR = 4cm, PQ = 6cm and angle PQR = 105°. Construct the bisector of angle PQR to meet PR at T. What is the size of angle PTQ?

A. 98° B. 83°
C. 52.5° D. 29.5°

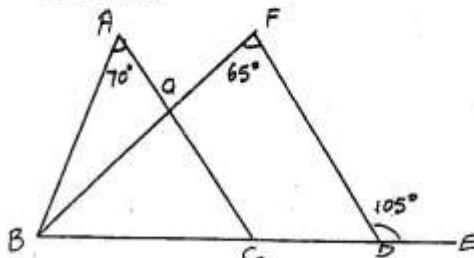
21. A farmer had 360 sheep and 20 cows. He sold 30% of the sheep and increased the number of cows by 15%. How many animals did he finally have?

A. 275 B. 111
C. 252 D. 335

22. Sonko bought a shirt for sh. 660 after he had been offered a 20% discount. What was the marked price?

A. Sh. 550 B. Sh. 825
C. Sh. 528 D. Sh. 729

23. In the diagram below BCDE, BGF, and AGC are straight lines. AB - AC. Angle BAC = 70° Angle BFD = 65° and Angle FDE = 105°



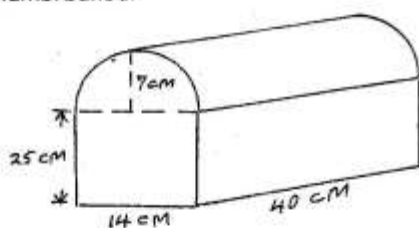
What is the size of the angle CGF ?

A. 95° B. 85°
C. 75° D. 60°

24. Liza deposited sh. 24 000 in a bank which offered her a simple interest rate of 10% per annum. How much money did she have at the end of 9 months?

A. Sh. 25 800 B. Sh. 21 600
C. Sh. 45 600 D. Sh. 22 200

25. The figure below represent a birthday bread Mumbi baked.



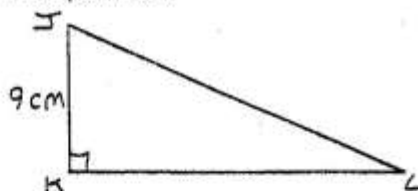
Find its volume?

A. 20 160 cm³ B. 17 080 cm³
C. 14 000 cm³ D. 17 920 cm³

26. Amen school received 200 litres of milk in 2dl packets. If the milk was in crates holding 40 packets each, how many crates were declared?

A. 2500 B. 250
C. 25 D. 10

27. Nyakondo draw the right angled triangle below whose area was 54 cm². If JK = 9 cm. Find the perimeter.



A. 36 cm C. 108 cm
B. 42 cm D. 225 cm

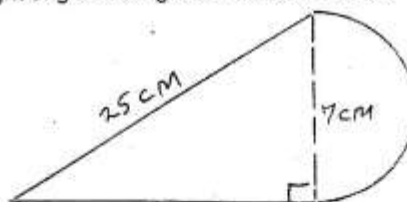
28. The table below shows bus fare in shillings from Maai Mahiu to Gilgil.

20	Longonot		
30	10	Naivasha	
40	30	20	Gilgil

Nyambura travelled from Maai Mahiu to Gilgil none stop while Mukami travelled from Maai - Mahiu to Naivasha and then to Gilgil. Who paid more and by how much?

A. Nyambura by Sh 50
B. Mukami by Sh 10
C. Nyambura by Sh. 36
D. Mukami by Sh 40

29. The figure below show a combination of a right angled triangles and a semi circle.



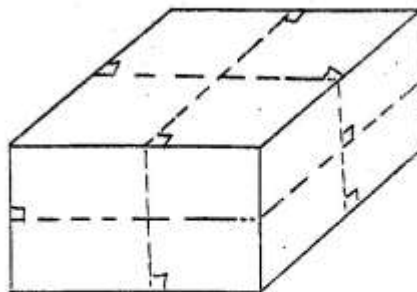
What is its area? (Take π as $\frac{22}{7}$)

A. 103.25 cm² B. 161 cm²
C. 106.75 cm² D. 122.5 cm²

30. A motorist started his journey at 0355 h and took 5 hours 50 min to arrive at his destination. At what time in 12h clock system did he arrive?

A. 9.05 p.m. B. 9.5 a.m.
C. 9.05 a.m. D. 9.45 p.m.

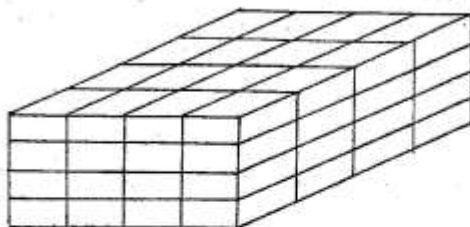
31. Salome had a box measuring 90 cm by 70 cm by 50 cm she tied the box with a string making right angles with the edges as shown.



If the knots used 20 cm. what was the total length of string used

A. 840 cm B. 820 cm
C. 440 cm D. 860 cm

32. A rectangular tank contains 5760 litres of water to a depth of 80cm. If the length of the tank is 3m what is its width?
A. 0.24m B. 2.4m
C. 24m D. 240m
33. The hire purchase terms for a bicycle is a deposit of Sh.3, 500 and 9 monthly instalments of Sh. 1200. The marked price of the bicycle is Sh 12,500. A discount of 8% is offered on cash payment. Mumbi bought the bicycle on hire purchase while Njeri bought it cash. How much less did Njeri pay for the bicycle than Mumbi.
A. Sh. 700 B. Sh. 800
C. Sh. 1800 D. Sh. 2800
34. Kamagoto village has 2500 girls. The number of boys is $\frac{4}{5}$ that of girls and that of women is $\frac{3}{4}$ that of the boys. If there are 1200 men, how many people are there in the village?
A. 3700 B. 7575
C. 7075 D. 7200
35. Wanjohi has a rectangular vegetable garden measuring 12m by 8. She then reduced the length by 20% and the decrease by 10%. What is the percentage decrease in its area?
A. 72% B. 36%
C. 64% D. 28%
36. The radii of two cylindrical containers of equal height are 7cm and 110.5cm. How many times would the smaller container be used to fill the larger one with milk?
A. $1\frac{1}{2}$ B. 1
C. $2\frac{1}{4}$ D. $3\frac{1}{2}$
37. There were 12 870 people who attended Nyeri zebra show on the first day. And $1\frac{1}{2}$ times as many on the second day. A total of 58,369 people attended the show during the three consecutive days. How many people attended the show on the third day?
A. 45 499 B. 26 194
C. 32 175 D. 19 305
38. Two sirens at Nyaguthi airports sound at intervals of 30 minutes and 45 minutes. If they sound together at 10.35p.m at what time would they sound together again?
A. 9.05a.m B. 11.05p.m
C. 9.05p.m D. 12.05a.m
39. Njau has a plot which measures 20cm by 15cm on a map. If the scale of the map is 1:100, what is the actual area in hectares?
A. 300ha B. 0.03ha
C. 0.3ha D. 3ha
40. What is $23\frac{3}{4}$ written in ratio form in its simplest form?
A. 19 : 20 B. 95 : 200
C. 19 : 40 D. 19 : 80
41. The mean of six numbers is 6.5 five of them are 3, 5, 9, 5 and 11. What is the median of the six numbers?
A. 5 B. 6
C. 5.5 D. 6.6
42. The figure below shows a number of cubes glued together to form a block. The faces of the block are all painted. How many cubes are painted on two faces only?



- A. 64 B. 40
C. 24 D. 3

43. The table below shows the ages of pupils in a class

Age in years	10	11	12	13
Number of pupils	6	9	18	12

This information is to be represented in a pie chart. What is the sum of angles respectively 10 and 12 years old?

- A. 1920 B. 1760
C. 1440 D. 1600

44. A bag contained mangoes and oranges. Kanini removed $\frac{1}{3}$ of the oranges and a quarter of mangoes. In all she removed twenty fruits, half of which were oranges. How many fruits remained in the bag?

A. 70 B. 30
C. 40 D. 50

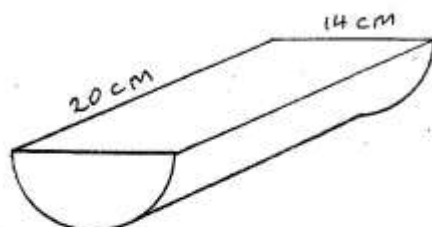
45. Weru is three times as old as his sister. Ten years ago their total age was twenty four years. How old will Weru be in three years time?

A. 11 yrs B. 14 yrs
C. 33 yrs D. 36 yrs

46. The cash price of a used pick up is sh 124,500. Esther bought it on hire purchase she paid 10% of the cash price and 15 monthly instalments of Sh. 10,000 each. What is the difference between the cash price and the hire purchase price

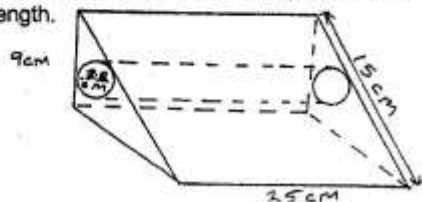
A. Sh. 25, 500
B. Sh. 162450
C. Sh. 37,950
D. Sh. 137,550

47. Kim used the trough below to feed his animals. What is its total surface area?



A. 594cm^2 B. 799cm^2
C. 874cm^2 D. 1540cm^2

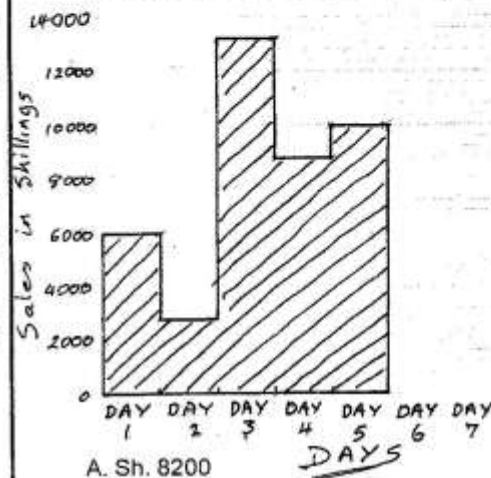
48. The figure below is a wooden wedge with a hole of diameter 2.8cm drilled through its length.



What is the volume of the wood?

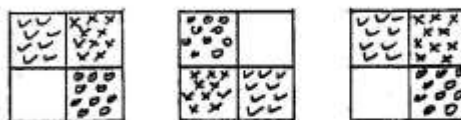
A. 3221cm^3
B. 2546cm^3
C. 1350cm^3
D. 1196cm^3

49. The graph shows sale of shirts in five days. What was the average sale per day?



A. Sh. 8200
B. Sh 41 000
C. Sh 13500
D. Sh 8500

50. Gikoi made the pattern below.



What is the next shape?

