PSL SCHOOL BASED ASSESSMENT
GRADE 9 TERM 1 2026
MATHEMATICS
2hrs

LEARNER'S NAME: _

WORKSPACE CODE:_ _ _ _ _ _ _ _ _ _ _ _ Date: _ _ _ _ _ _ _ _ _ _ _ _

INSTRUCTIONS TO THE LEARNER:

Write your name and date in the spaces provided above.
This question paper consists of two sections: **A** and **B**.
Answer all questions in Section B in the spaces provided in this question paper
Show all the workings in section B in the spaces provided
Non programmable calculators may be used, except where stated otherwise.
Answer all questions in the spaces provided.

FOR TEACHER'S USE ONLY	
Question Numbers (1-40)	Score
Learner's Score	
Total Score	
Performance Level	

SECTION A (20 Marks)

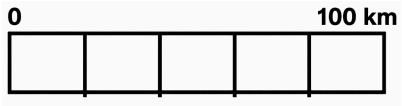
1. The length of a square mat is 3.425 metres. Find the area of the mat using the Mathematical table.

A. 11.73 B. 11.696
C. 1.8493 D. 1.8506

2. A pupil read a book on Monday, Tuesday and Wednesday. He read $^{2}/_{3}$ of the book on Monday. On Tuesday he read ½ of the remainder and the rest on Wednesday. Which of the following shows the fraction in ratio of the book he read on Tuesday.

A. 2:3 B. 3:2
C. 1:6 D. 5:6

3. The diagram below shows a linear scale. One division represents 1cm. Represent the linear scale in statement form.



A. 1 cm represents 100km
B. 1 cm represents 20km
C. 1 cm represents 25km
D. 4 cm represents 100km

4. On a certain day 22 buses, 15 cars and 17 matatus transported passengers from one town to another. Find the mean of vehicles on that day.

A. 18 B. 45
C. 17 D. 54

5. A two digit number is formed from the first four prime numbers. How many possible numbers can be obtained?

A. 4 B. 8
C. 12 D. 16

6. Three employees were paid sh 36000 after working for 10 days. How much did each employee earn per day?

A. 1200 B. 3600
C. 12000 D. 108000

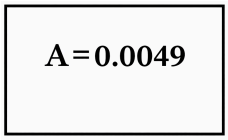
7. The probability of visiting the hospital is $^{5}/_{17}$. Find the probability of not visiting the hospital.

A. $^{5}/_{17}$ B. $^{12}/_{17}$
C. $^{17}/_{12}$ D. $^{17}/_{5}$

8. The teacher displayed the following numbers on a flashcard. 15, 25 and 30. What is the least number that can be divided by the numbers without the remainder?

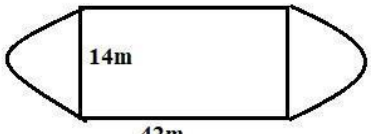
A. 5 B. 300
C. 150 D. 70

9. The diagram below shows a square piece of land with an area of 0.0049 m2. Find the measure of its side.



A. 0.0007 B. 0.7
C. 0.07 D. 0.0196

10. The diagram below shows a grass lawn. Find its area in hectares

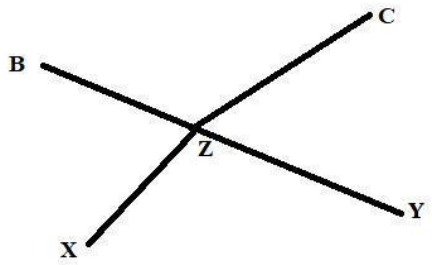


A. 0.742 B. 0.0742
C. 742 D. 7.42

11. The scale on a map is given as 1cm represents 2km. What is the drawing length if the actual length is 10000m?

A. 5000km B. 20km
C. 20000km D. 5km

12. The diagram below shows an object with different angles. Measure angle XZY.



A. 68 B. 112
C. 128 D. 52

13. A metal cube has a volume of 7640 cm^3. Use the Mathematical table to calculate its length correct to 2-decimal places.

A. 87.41 B. 19.61
C. 87.74 D. 19.70

14. The price of kerosene increased in the ratio 5:3. If the original price was Ksh.120. Find the new price of the kerosene.

A. 72 B. 200
C. 120 D. 75

15. During the census, the enumerator recorded the age of pupils as follows: 12, 14, 11, 13, 10, 9. Find the median age.

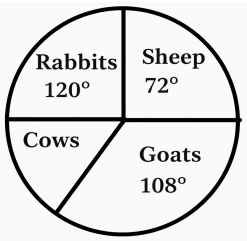
A. 11.5 B. 12

C. 12.5 D. 13

16. Grade 9 learners prepared a chart with the pattern below to show the number of pupils who participated in athletic competition for the last 4 years. 4, 9, 25, 49, _____. Find the missing number.

A. 81 B. 64
C. 24 D. 121

17. The diagram below shows a pie chart with different animals in a given farm. If there were 18 goats. How many more sheep than cows are there in the farm?



A. 20 B. 72
C. 12 D. 2

18. The height of a tree was recorded as 3.0957. What is the difference between the value of digit 9 and 5 in the number?

A. 0.09 B. 0.005
C. 0.085 D. 0.095

19. The chart below shows the charges for sending and withdrawing money using mobile money services. A parent sent 20050 to his daughter who is on a different mobile money network.

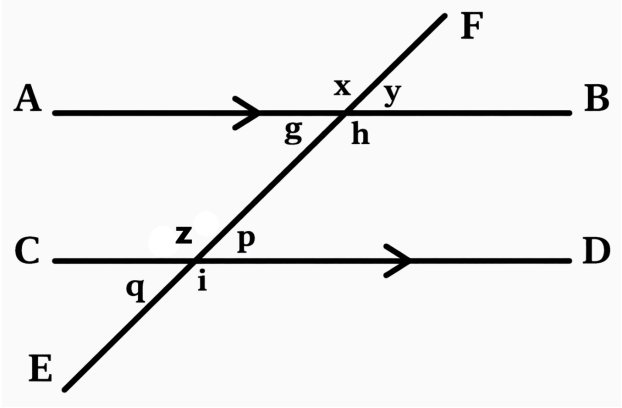
Minimum sh	Maximum sh	Sending Charges Same network	Sending charges different network
1	49	Free	10
50	100	Free	15
101	500	6	45
501	1000	12	49
1001	1500	22	59
1501	2500	32	74
2501	3500	51	112
3501	5000	55	135
5001	7500	75	166
7501	10000	87	205
10001	15000	97	265
15001	20000	102	288
20001	35000	105	309
35001	50000	108	350

Calculate the total amount of money the parent should have in order to send Ksh.20050.

A. 20359 B. 20050
C. 20155 D. 309

20. In the diagram below line AB and CD are parallel lines. Line EF is a transversal. Which of the following statements is true?

A. Angle x=angle y (alternating angles)
B. Angle g =angle p (supplementary angles)
C. Angle h = angle p
D. Angle g =angle q (corresponding angles)

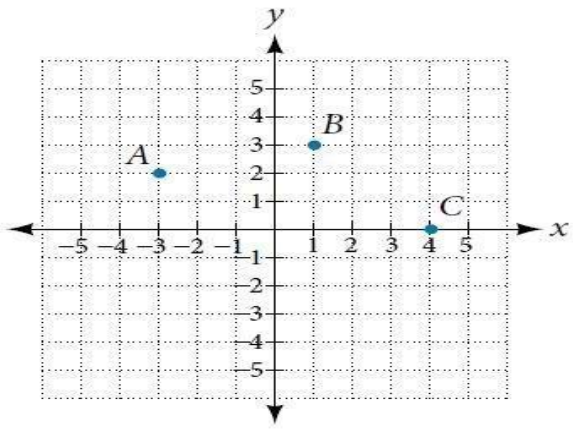


SECTION B

21. A solid metal of volume **0.005832m^3** was melted and recast into a cube. Using the Mathematical table, find the length of the cube formed. (3mks)

22. During a mathematical lesson, a teacher displayed a flash card written **0.05680**. Express the number to 3 significant figures. (1mks)

23. The diagram below shows a Cartesian plane on a graph with different points. Identify the coordinates of point A and C. (2mks)



Point A

Point C

24. A Teacher displayed the number below during group discussion. Without using tables or calculators, evaluate and give your answer as a mixed fraction.(3mks)

-8 × 4 + 1560 ÷ 4 of (-36+30) -5- (-8) × 2 + 6

25. Learners were discussing the different laws of indices. With clear illustration, find the value of x in $(3^5)^x = (3^4)^x \div 9$ (3mks)

26. A steel metal pipe 6m long has a cross section which is in the shape of a circle. The two equal sides of a circle have a radius of 14m. Calculate the total surface area of the pipe in square metres. (3mks)

27. Learners were given one packet of milk in the form of a rectangular pyramid during a school trip. Sketch the net of the packet of the milk. (2mks)

28. During Mathematics lesson, Ben played a Video game in which he gains 15 points for a win at the end of a level and loses 10 points at every foul. If he won 20 levels and made 12 fouls, Find the total points earned by him in the whole game. (2mks)

29. The number of malaria patients decreased by 200 between January and February 2023. If 1000 patients contracted malaria in the month of January. Find the percentage change in the month of February. (2mks)

30. Three business partners Akili, Mali and Zubenda shared a profit of **sh 800,000** in the ratio **2:3:5** respectively. How much did each partner receive?

(3mks)

31. In Bidii School, the Mathematics club members were analyzing and relating logarithms. Determine the logarithm of **10,000** that they come up with during their discussion. (Show the working)
(2mks)

32. Four grade 9 learners acquired books in preparation for a new term. The number of books was arranged in ascending order. The first three learners were **4, 8 and 16**. Determine the number of books purchased by the **fourth** learner given that the numbers were in continuous proportion. (2mks)

33. During a house construction, a contractor used **20 bags** of cement and **40 wheelbarrows** of sand on the first day. On the second day, he used **30 bags** of cement in the same ratio as the first day. Calculate the number of wheelbarrows of sand used on the second day. (2mks)

34. Sixteen men can dig a hectare of land in 4 days. How many days will it take 8 men working at the same rate to complete digging the same hectare of land.

35. During a Mathematics lesson, Learners were discussing the Order of Matrices. A matrix is an arrangement of numbers in rows and columns. State the order of the matrix below (2mks)
[1 3 5 0 5 -4 7 1 9 6 1 2]

36. A straight line passes through points (-2, 1) and (6, 3).
(a) Determine the equation of the line in the form of $y = mx + c$ (4mks)

(b). From the above equation determine the x and y intercept. (3mks)

(c). The straight line above is perpendicular to a line P at point(-1, 6). Find the equation of P in the form ax + by = c where a, b and c are constant. (4mks)

37. Given that the ratio of x:y = 2:3
(a). Find the ratio (5x - 2y): (x + y) (3mks)

(b). Hence evaluate: $\frac{3x}{4y}$ (1mk)

38. The area of the floor of a square room is 29.16 square metres. Each side of another square room is half the length of the first room.
(a) What is the length of one side of the floor of the second room? (2mks)

(b) How many tiles of each 15cm by 15cm will be needed to cover the floor of the second room completely. (2mks)

39. The table below shows the number of litres of milk delivered to a cooling plant during one week.

Days of the week	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Number	54	55	52	58	56	59	51

(a) On which two consecutive days was the total amount of milk delivered the most.

(b) What was the mean number of litres delivered during the week.

(c) What was the median number of litres delivered.

40. A fruit vendor spent sh. 1200 to buy the following fruits.
36 mangoes | 40 oranges | 48 bananas
He later sold the fruits as follows.
1 mango for sh.10
2 oranges for sh.30
4 bananas for sh.50
How much profit did he make? (3mks)