



CHITIPA DISTRICT COUNCIL

2024 PSLCE POST COACHING EXAMINATION

MATHEMATICS

(100 marks)

Subject Number: P131

Time Allowed: 2 hours

08:00 – 10:00 am

Tuesday, 11th April , 2024

Name of Candidate: _____
(Surname First)

Name of School: _____

Instructions

1. This paper contains 8 printed pages. Please check
2. There are 20 multiple choice questions in Section A and 10 questions in Section B.
3. Answer all questions. In Section A, encircle the letter corresponding to the right answer to each question. In Section B, write your answers the spaces provided under each question.
4. In Section B, show all your working.
5. The use of electronic calculators is not allowed.
6. In the table provided on this page, tick against the question number you have answered.
7. Please make sure you have written your examination number, your name and school on the question paper in the spaces provided.
8. Hand in your examination paper to the invigilator when time is called to stop writing.

	Tick 21-30 if answered	Do not write in these columns	
1-10			
11-20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Turn over

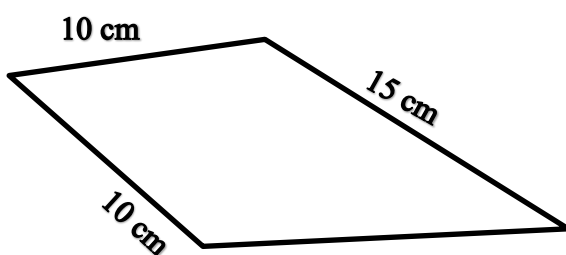
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SECTION A (40 marks)

Answer all questions in this section

1. Simplify $0.75 - 0.25 \div 0.5$
 A. 02.5 C. 0.25
 B. 025 D. 25.0
2. Write 499 in Roman Numerals.
 A. CCCC C. CDXCIX
 B. CCCIX D. CCXCIX
3. Express 0.120532 to 3 significant figures.
 A. 0.121 C. 0.12
 B. 1205 D. 012.05
4. Calculate the difference between the L.C.M and the H.C.F OF 16, 20 and 40.
 A. 4 C. 30
 B. 80 D. 76
5. Simplify $5t + 12r + 3t - 10r$
 A. $2t - 2r$ C. $15t + 2r$
 B. $8t + 2r$ D. $8t - 2r$
6. Chisomo takes 2 hours and 30 minutes to walk a distance of 15km. Calculate Chisomo's speed in metres per minute.
 A. 6m/min C. 100m/min
 B. 10m/min D. 125m/min
7. Express 0.37 litres in cm^3 .
 A. 37cm^3 C. 3700cm^3
 B. 370cm^3 D. 37000cm^3

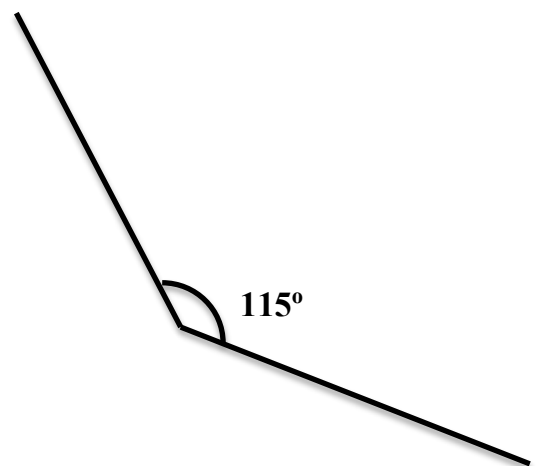
Figure 1 shows a quadrilateral ABCD.



15 cm

8. What is the name of the quadrilateral?
 A. kite C. square
 B. trapezium D. rhombus
9. A person deposited two K2000 bank notes, one K1000 bank note and forty K20 bank notes. What was the total money deposited?
 A. K5800 C. K5600
 B. K5400 D. K5300

Figure 2 below shows a type of an angle. Use it to answer question 10.



10. What name is given to this type of angle?
 A. acute C. obtuse
 B. right angle D. reflex

Table 1 shows the bank exchange rate of Malawi kwacha against some foreign currencies in December 2015.

11. If a person exchanged \$20 and £10, how much money in Malawi Kwacha did he get altogether?
 A. K8590 C. K19730
 B. K11140 D. K20220
12. What is the next number in the following pattern?
 810, 270, 90, _____.
 A. 45 C. 15
 B. 30 D. 10
13. Formulate the number sentence for the following statement.
 Luka thinks of a number c and then adds 8 to it, the result is greater than 16.
 A. $c + 8 \leq 16$ C. $c + 8 \geq 16$
 B. $c + 8 < 16$ D. $c + 8 > 16$
14. Jane was awarded 75% in Mathematics test. If the test was marked out of 40, how many marks did Jane get?
 A. 25 C. 40
 B. 30 D. 50

Table 3 shows a message sent by telegram.

**FROM: MPHATSO BOX 555 LIWONDE
 SCHOOL CLOSSES NEXT
 WEEK**

**TO: MRS MWALE BOX 6814
 BLANTYE**

Currency	Buying	Selling
Us Dollar (\$)	557	571
British Pound (£)	859	880

15. How much was the cost of sending the telegram at K50 per word?
 A. K850 C. K750
 B. K950 D. K650
16. Find the Prime factors of 81.
 A. $3 \times 3 \times 3 \times 3$ C. 9×9
 B. 81×1 D. 27×3
17. What is the missing number in this equivalent fraction?
 $\frac{3}{4} = \frac{\square}{12}$
 A. 3 C. 6
 B. 8 D. 9
18. The circumference of the base of a tin is 176cm. Calculate its radius. (take π as $\frac{22}{7}$)
 A. 16 cm C. 56
 B. 28 cm D. 112 cm
19. Effie will celebrate her diamond jubilee next year. In which year was she born?
 A. 1969 C. 1958
 B. 1968 D. 1960
20. A vendor is given a commission of 20% for goods sold. How much commission did the vendor receive if K112 000 worth of goods were sold.
 A. K11200 C. K89600
 B. K22400 D. K99600

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Answer **all** questions in this section. Write your answer in the space provided under each question. Show your working.

21. Simplify $\frac{5}{2}$ of $(\frac{13}{5} - 1\frac{1}{5} \div \frac{2}{3})$

6 marks

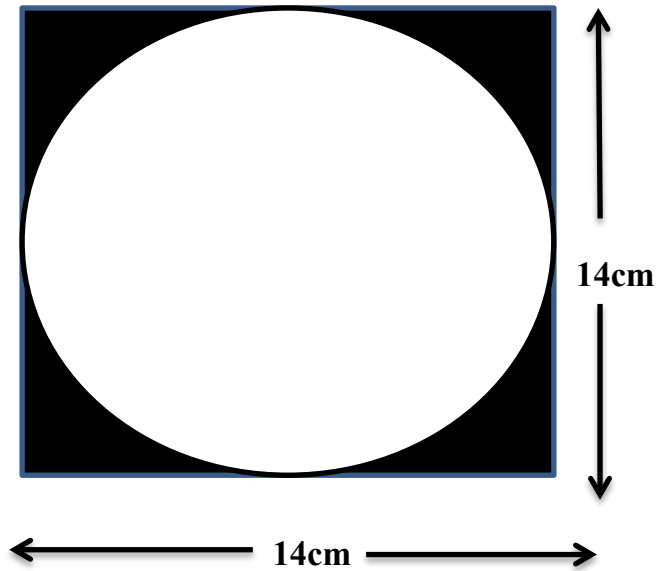
22. a. Solve the equation. $2x - 7 = x + 2$

4 marks

b. Simplify the ratio, $1\frac{1}{4}:1\frac{2}{3}$ to their lowest term.

3 marks

Figure 3 is composite figure consisting of a square and a circle.



23. Calculate the area of the shaded part.

6 marks

23. a. Divide the sum of 5.4 and 0.96 by 1.6.

4 marks

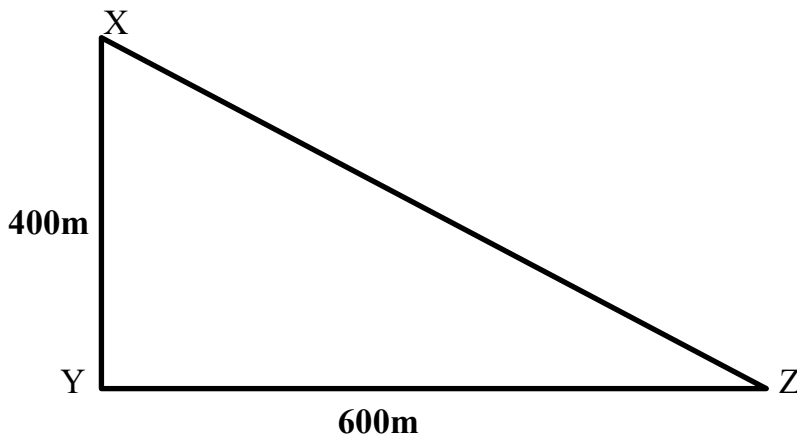
b. Multiply 129 m 60 cm by 8.

4 marks

25. Dokiso decreased a number by 10% and Mayingiso increased the same number by 20%. If the difference of the new numbers Dokiso and Mayingiso got is 60, calculate the original number.

5 marks

Figure 4 shows a garden in form of a triangle XYZ in which $XY = 400$, $YZ = 600$ m and angle $XYZ = 90^\circ$.







26. a. Draw the figure accurately using a scale of 1 cm representing 100m.

4 marks

b. Measure line XZ and state its length on the actual ground.

1 mark

Figure 5 shows a picture graph. Study it and answer the questions that follow.

YEAR	TOBACCO HARVEST
2012	
2013	
2014	
KEY:	 Represent 1000kg of tobacco.

27. a. If 1kg cost K400, how much money was realized in 2013.

2 marks

b. What was the average tobacco harvest in 3 years.

5 marks

28. Mr Phiri had K10,000 balance in the bank on 1 April 2022. During the month she made the following transactions:

2 May, 2022 sold eggs for K8000

10 May, 2022 withdrew K5000 from bank

21 May, 2022 banked K4500

Prepare a cashbook for her and balance it.

(6 marks)

29. A primary school has 1208 pupils. For every 5 boys, there are 3 girls. How many girls are there at the school.

3 marks

30. **Table 3** shows income tax rates. Use it to answer question 30.

INCOME PER MONTH	RATE FOR TAX
First K9,000	0%
Next K3,000	15%
Excess (over) K12,000	30%

Calculate an income tax on the salary of K46700 per month.

7 marks

END OF QUESTION PAPER

NB: This paper contains 8 pages.