



MOLERE SCHOOL EXAMINATION BOARD

2024 PSLCE FINAL TOUCHES EXAMINATION

MATHEMATICS

(100 Marks)

SECTION A: MULTIPLE CHOICE (40 Marks)

Encircle the letter (A, B, C or D) that gives the correct answer.

1. which of the following is the list of prime factors of 210?

- A. 1, 7, 35, 105 C. 2, 3, 5, 7
B. 1, 2, 4, 5 D. 1, 3, 5, 7

2. Subtract 0.176 from one whole number.

- A. 1.824 B. 0.824 C. 0.924 D. 0.934

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

- A. 4:3 B. 15:20 C. 20:15 D. 3:4

4. Express 60 tambala as a fraction of 10 Kwacha.

- A. $\frac{60}{100}$ C. $\frac{3}{50}$
B. $\frac{15}{250}$ D. $\frac{3}{5}$

5. Simplify $425+845 \times 87$

- A. 73940 B. 1270 C. 73515 D. 110,490

6. Express 1549 to the nearest hundred.

- A. 1550 B. 1500 C. 2000 D. 1540

7. The following are quadrilaterals **except**

- A. Square C. rectangle
B. Triangle D. trapezium

Use Figure 1 below to answer questions 8 and 9.

8. Looking at the tree; the car is drawn to the ..

- A. North East of the tree
B. South West of the tree
C. South East of the tree
D. North West of the tree

9. If the tree is 5.3cm and was drawn using a scale of 1cm representing 1 metre. Find the actual length of the tree.

- A. 5m 300cm C. 5.3cm
B. 53m D. 50.300cm

10. How many trips will a bus carrying 150 passengers per trip make to transport 6000 passengers to a golden jubilee.

- A. 40 B. 50 C. 60 D. 900,000

11. The initial temperature reading on a thermometer was 30°C . After being placed under the armpit of a patient, the temperature reading on the thermometer rose by 37°C . What was the new reading on the thermometer?

- A. 37°C B. 7°C C. 30°C D. 67°C

12. Solve the equation $2t + 1 = 11 + t$.

- A. $t=4$ B. $t=6$ C. $t=10$ D. $t=11$

13. Yankho walked a distance of 15km at an average speed of 100m/min. Calculate the time taken in hours and minutes to cover the distance.

- A. 150 minutes C. 2hrs 0.5mins
B. 2hrs 30 mins D. 3hrs 30 mins

14. Write $\frac{1}{9}$ of the complete turn angle.

- A. 40 degrees C. 20 degrees

B. 10 degrees D. 30 degrees

15. What is a period of 1000 years called..?

- A.** Century C. Instrum
B. Millenium D. olympiad

16. A radio was sold for k4000 at a discount of 20%. What was the cash discount?

- A. K500 B. K1000 C. K3000 D. K10000

17. A vegetable garden is 57m long and 36m wide. What is the length of the wire required to fence the garden?

- A. 2052 m² B. 184m C. 186m D. 93m

Use the angles below to answer questions 18 and 19.

18. Arrange the angles in descending order.

- A. b,a,c,d C.d,c,a,b
B. a,b,c,d D. c,d,a,b

19. Identify a reflex angle from the angles shown.

- A. a B. b C. c D. d

20. Express 20.0054 to 4 significant figures.

- A. 20.01 B. 20.00 C. 20.0054 D. 20.005

SECTION B (60 Marks)

21. a. Multiply 5l 125ml by 9. (3 marks)

b. Simplify $0.24 - 0.04 \times 0.35 + 0.14$ and give the answer to 3 decimal places. (3 marks)

22. a. The circumference of a circle is 88cm. Calculate its radius. (Take $\Pi = \frac{22}{7}$). (4 marks)

b. By selling a car for K500,000.00, a loss was made at the rate of 6t per Kwacha. Find the amount lost. (4 marks)

23. a. Model 0.124 correctly on the abacus. (2 marks)

b. Dula has y mangoes, Chako has 10 less mangoes than Dula and Wanga has 15 more mangoes than Dula. How many mangoes have they altogether? (4 marks)

24. Figure below shows a rectangle WXYZ with two semicircles. Use it to answer the following questions.

If $AB = \frac{3}{4} AD$ and $AD = 28\text{cm}$, calculate the area of the figure. (6 marks)

25. a. Convert 2 days 5 hours 10 minutes to minutes. (4 marks)

b. Mphatso bought 5 metres of a cloth at K750 per metre, 18 bananas at 3 for K100 and $3\frac{1}{2}$ Kg of rice at K480 per Kg. Prepare a bill for Mphatso. (5 marks)

26. Table below shows rates of tax on a salary per month for a certain country.

Salary per month	Tax rate
First K9000	0% (Tax free)
Next K10,000	15%
Next K12,000	25%
Next K15,000	35%

a. If a worker pays K51,000.00 as a tax per year, calculate the worker's monthly salary. (6 marks)

b. A school with 1200 learners had enough 'Likuni phala' flour for 30 days. If after 5 days, some more learners joined the school and they used 24 days to finish the remaining 'Likuni phala' flour. How many learners joined the school? (4 marks)

