

Maths

JHS 3 | Mathematics | First Term — 2025-2026 | Duration: 60 minutes | Total Marks: 122

Instructions:

SECTION A — MULTIPLE CHOICE QUESTIONS

1. Factorize $12ab + 16b$. (1 mark)
 - A. $4b(3a + 4)$
 - B. $4a(3b + 4)$
 - C. $4(3ab + 4b)$
 - D. $b(12a + 16)$
2. Solve the inequality $2x + 7 > 5/2$. (1 mark)
 - A. $x > -2.25$
 - B. $x > 2.25$
 - C. $x < -2.25$
 - D. $x > -9/4$
3. Solve the inequality $(1/2)(5x - 4) < x + 11/2$. (1 mark)
 - A. $x < 5$
 - B. $x > 5$
 - C. $x < 15$
 - D. $x > 15$
4. Graph the solution of $x \geq 4$ on a number line. (Conceptual) (1 mark)
 - A. Closed circle at 4 shading left
 - B. Open circle at 4 shading right
 - C. Closed circle at 4 shading right
 - D. Open circle at 4 shading left
5. A man has 260m of fencing for a rectangular field 50m wide. How long is the field? (1 mark)
 - A. 130m
 - B. 80m
 - C. 100m
 - D. 160m
6. A man paid GH?290 for 11 books. Geography books cost GH?30 and history books cost GH?20. How many geography books did he buy? (1 mark)
 - A. 5
 - B. 6
 - C. 7

D. 8

7. The sum of the interior angles of a hexagon (6 sides) is... (1 mark)

A. 540°

B. 720°

C. 900°

D. 360°

8. What is the formula for the sum of interior angles of an n-sided polygon? (1 mark)

A. $(n-2) \times 90$

B. $(n-2) \times 180$

C. $(n-1) \times 180$

D. $(n-1) \times 90$

9. Which of the following is NOT a parallelogram? (1 mark)

A. Square

B. Rectangle

C. Rhombus

D. Trapezium

10. What is the surface area of a cuboid of length 5cm (1 mark)

A. width 3cm

B. and height 2cm?

C. 62 cm^2

D. 30 cm^2

11. What is the area of a triangle with base 6cm and height 4cm? (1 mark)

A. 12 cm^2

B. 24 cm^2

C. 10 cm^2

D. 20 cm^2

12. If $a = 5$ and $b = 3$ (1 mark)

A. what is $a^2 + b^2$?

B. 16

C. 25

D. 34

13. Solve the equation $2x - 3 = 15$. (1 mark)

A. 6

B. 7

C. 8

D. 9

14. What is $15/10$ in its simplest form? (1 mark)

A. $5/3$

B. $3/2$

C. $1/2$

D. $5/2$

15. A car agent gets 3.5% commission on a car sold for GH¢68 (1 mark)

A. 000. What is the commission?

B. GH¢2380

C. GH¢1943

D. GH¢23800

16. The VAT rate in Ghana is 12.5%. If an item is GH¢4500 VAT inclusive (1 mark)

A. what is the basic cost?

B. GH¢4000

C. GH¢4200

D. GH¢5000

17. What is the probability of rolling a 6 on a fair die? (1 mark)

A. $1/6$

B. $1/2$

C. $1/3$

D. $1/4$

18. If you answer 80% of 20 questions correctly (1 mark)

A. how many did you answer correctly?

B. 12

C. 14

D. 16

19. What is 56734 correct to two significant figures? (1 mark)

A. 56000

B. 56700

C. 57000

D. 57034

20. What is the name of the point where the angle bisectors of a triangle intersect? (1 mark)

A. Circumcentre

B. Incentre

C. Orthocentre

D. Centroid

21. Calculate $\frac{4}{5} - \frac{1}{6}$. (1 mark)

- A. $\frac{19}{30}$
- B. $\frac{23}{30}$
- C. $\frac{3}{4}$
- D. $\frac{5}{11}$

22. What is the volume of a cylinder with radius 7cm and height 21cm using $\pi = \frac{22}{7}$? (1 mark)

- A. 3234 cm^3
- B. 1078 cm^3
- C. 462 cm^3
- D. 154 cm^3

23. Calculate $\frac{2}{3} \times \frac{3}{4}$. (1 mark)

- A. $\frac{6}{12}$
- B. $\frac{1}{2}$
- C. $\frac{2}{4}$
- D. $\frac{3}{8}$

24. Simplify $12 \times (5 \times 4)$ using the associative property. (1 mark)

- A. $(12 \times 5) \times 4 = 240$
- B. $12 \times (4 \times 5) = 240$
- C. $(12 \times 4) \times 5 = 240$
- D. All of the above

25. What is the complement of a 40° angle? (1 mark)

- A. 50°
- B. 60°
- C. 90°
- D. 140°

26. Find the simple interest on GH¢4500 at 3% per annum for 3 years. (1 mark)

- A. GH¢405
- B. GH¢135
- C. GH¢450
- D. GH¢540

27. What is the decimal equivalent of $\frac{1}{8}$? (1 mark)

- A. 0.1
- B. 0.125

- C. 0.25
- D. 0.2

28. Simplify $3^2 \times 3^3$. (1 mark)

- A. 3^3
- B. 9^3
- C. 3^9
- D. 2^3

29. Calculate $\frac{3}{4} + \frac{7}{8}$. (1 mark)

- A. $\frac{10}{12}$
- B. $\frac{13}{8}$
- C. $\frac{11}{8}$
- D. $\frac{17}{8}$

30. Express 0.00567 in standard form. (1 mark)

- A. 5.67×10^{-3}
- B. 5.67×10^{-2}
- C. 5.67×10^3
- D. 5.67×10^2

31. What is the area of a circle with radius 7cm? ($\pi = \frac{22}{7}$) (1 mark)

- A. 154cm^2
- B. 44cm^2
- C. 88cm^2
- D. 616cm^2

32. Make x the subject of the formula $y = mx + c$. (1 mark)

- A. $x = (y - c)/m$
- B. $x = (y + c)/m$
- C. $x = m(y - c)$
- D. $x = m/(y - c)$

33. Simplify $34 \div 32 + 40 - 23 \times 32 \div 9$ using BODMAS. (1 mark)

- A. 36
- B. 40
- C. 38
- D. 42

34. A student scores 70 and 76. What score in the third test gives an average of 80 or higher? (1 mark)

- A. 90

- B. 92
- C. 94
- D. 96

35. A trader sells oranges from two baskets. Basket A had 85 oranges and she sold 48. She sold 59 oranges from basket B and was left with the same number as in Basket A. How many were originally in Basket B? *(1 mark)*

- A. 96
- B. 85
- C. 59
- D. 48

36. The price of a jacket is three times that of a shirt. A jacket costs GH¢560.65. Mr Mensa bought two jackets and four shirts. What is the total cost correct to two decimal places? *(1 mark)*

- A. GH¢1121.30
- B. GH¢1495.07
- C. GH¢1868.83
- D. GH¢1682.50