

maths

JHS 3 | Mathematics | First Term — 2025-2026 | Duration: 60 minutes | Total Marks: 54

Instructions:

SECTION A — MULTIPLE CHOICE QUESTIONS

1. What is the name for a triangle with all sides equal? (1 mark)
 - A. Isosceles
 - B. Scalene
 - C. Equilateral
 - D. Right-angled
2. Find the equation of a line with slope $\frac{2}{3}$ passing through (3 (1 mark)
 - A. -1).
 - B. $y = (\frac{2}{3})x + 1$
 - C. $y = (\frac{2}{3})x - 3$
 - D. $y = (\frac{2}{3})x - 1$
3. Solve the equation $2x - 3 = 15$. (1 mark)
 - A. 6
 - B. 7
 - C. 8
 - D. 9
4. If you answer 80% of 20 questions correctly (1 mark)
 - A. how many did you answer correctly?
 - B. 12
 - C. 14
 - D. 16
5. Under PNDC Law 247 (1 mark)
 - A. what is the total SSNIT contribution rate?
 - B. 13.0%
 - C. 18.5%
 - D. 17.5%
6. Which data collection method involves asking people questions? (1 mark)
 - A. Observation
 - B. Experiment
 - C. Interview
 - D. Database

7. Calculate 5.2×100 . (1 mark)
- A. 0.052
 - B. 5.2
 - C. 52
 - D. 520
8. What is the volume of a cube with side 3cm? (1 mark)
- A. 9cm^3
 - B. 18cm^3
 - C. 27cm^3
 - D. 36cm^3
9. Which property is shown by $a \times (b + c) = (a \times b) + (a \times c)$? (1 mark)
- A. Commutative
 - B. Associative
 - C. Distributive
 - D. Identity
10. Simplify $5x + 3x$. (1 mark)
- A. $8x$
 - B. $8x^2$
 - C. $15x$
 - D. $15x^2$
11. If total cost (t) is proportional to the number of items (n) at constant price (p) (1 mark)
- A. the equation is?
 - B. $t = n/p$
 - C. $t = p/n$
 - D. $t = pn$
12. What type of fraction is $7/4$? (1 mark)
- A. Proper
 - B. Improper
 - C. Mixed
 - D. Unit
13. 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. $(n-1) \times 90$

- 14.** 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
- 15.** What is $\frac{2}{3}$ of 150? (1 mark)
- A. 50
 - B. 75
 - C. 100
 - D. 125
- 16.** Write 0.75 as a percentage. (1 mark)
- A. 7.5%
 - B. 75%
 - C. 750%
 - D. 0.75%
- 17.** Factorize $3x + 4xy$. (1 mark)
- A. $x(3 + 4y)$
 - B. $x(3 + 4x)$
 - C. $3x(1 + y)$
 - D. $xy(3 + 4)$
- 18.** What is the place value of 7 in 3789? (1 mark)
- A. 789?
 - B. Ones
 - C. Tens
 - D. Hundreds
- 19.** What is 15% of 200? (1 mark)
- A. 20
 - B. 25
 - C. 30
 - D. 35
- 20.** What is the perimeter of a square of side 5cm? (1 mark)
- A. 20cm
 - B. 25cm
 - C. 10cm
 - D. 15cm

21. If $2x = 64$ (1 mark)

- A. what is x?
- B. 4
- C. 5
- D. 6

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

- A. what is $a^2 + b^2$?
- B. 16
- C. 25
- D. 34

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

- A. Square
- B. Rectangle
- C. Rhombus
- D. Trapezium

24. What type of angle is 180° ? (1 mark)

- A. Acute
- B. Obtuse
- C. Right
- D. Straight

25. What is the value of $\sqrt{2}$ approximated to three decimal places? (1 mark)

- A. 1.412
- B. 1.414
- C. 1.416
- D. 1.418

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

- A. 540°
- B. 720°
- C. 900°
- D. 360°

27. What is the coefficient of y in $5xy$? (1 mark)

- A. 5
- B. $5x$
- C. xy
- D. y

28. 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. $x = m/(y - c)$

29. Simplify $6^2 \times 2^6$. (1 mark)

- A. $6^2 \times 2^6$
- B. 2^6
- C. 8^3
- D. 4^2

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

- A. 50°
- B. 60°
- C. 90°
- D. 140°

31. Calculate $5/8 \div 2/3$. (1 mark)

- A. $15/16$
- B. $5/12$
- C. $10/24$
- D. $16/15$

32. 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

33. 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

34. The graph showing proportional relationships is a... (1 mark)

- A. Curve line through the origin
- B. Straight line through the origin
- C. Straight line not through origin
- D. Parabola

35. What is the bearing of East from North? (1 mark)

- A. 090°
- B. 045°
- C. 135°
- D. 180°

36. What is the back bearing of 060° ? (1 mark)

- A. 060°
- B. 120°
- C. 240°
- D. 300°

37. What is the circumference of a circle with diameter 14cm? ($\pi=22/7$) (1 mark)

- A. 22cm
- B. 44cm
- C. 88cm
- D. 154cm

38. Simplify $18 \div 6 \times (4 - 3) + 6$. (1 mark)

- A. 3
- B. 9
- C. 12
- D. 15

39. 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

40. What is the value of $\sqrt{12}$ approximated to one decimal place? (1 mark)

- A. 3.4
- B. 3.5
- C. 3.6
- D. 3.0

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

- A. 56000
- B. 56700
- C. 57000
- D. 57034

42. Round 975.8674 to three decimal places. (1 mark)

- A. 975.867
- B. 975.868
- C. 975.870
- D. 975.900

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

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

44. Find the equation of a line with slope 2 and y-intercept -3. (1 mark)

- A. $y = 2x + 3$
- B. $y = -2x - 3$
- C. $y = 2x - 3$
- D. $y = x - 3$

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

- A. 0.1
- B. 0.125
- C. 0.25
- D. 0.2

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

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

47. 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

48. What is the value of $5^2 \times 5^3$? (1 mark)

- A. 5^5
- B. 5^6
- C. 25^5
- D. 25^6

49. 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

50. 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

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

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

52. Solve the inequality $(1/2)(5x - 4) < x + 11/2$. (1 mark)

- A. $x < 5$
- B. $x > 5$
- C. $x < 15$
- D. $x > 15$

53. 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

54. 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