



# Myfuture CBC Revision

## Mathematics - GRADE 8

### Question Paper

1. What is the place value of digit 4 in the number 0.27964?

- A. Hundreds of thousandths
- B. Tens of thousandths
- C. Tens of thousands
- D. hundreds of thousands

2. Find the capacity of the cylinder in litres whose radius and height are 70 cm and 50 cm respectively?

- A. 77
- B. 770000
- C. 770
- D. 7.7

3. Expand and simplify the expression:  $(2x + 3)(x - 4)$

- A.  $2x^2 - 5$
- B.  $2x^2 - 5x - 12$
- C.  $2x^2 - 8$
- D.  $2x^2 - 8x - 12$

4. A matatu covers a distance of 60 km at a speed of 80 km/hr. How long does it take to cover this distance?

- A. 6 hours
- B. 7 hours
- C. 5 hours
- D. 8 hours

5. Solve  $\frac{1}{2} - \frac{1}{3} =$

- A.  $\frac{3}{8}$
- B.  $\frac{1}{12}$
- C.  $\frac{1}{24}$
- D.  $\frac{4}{24}$

6. How many sides must be given to construct a triangle?

- A. At least one
- B. All sides
- C. At least two
- D. At least three

7. Leena bought 22 boxes of crayons for \$28.16. How much did she pay for each box of crayons?

- A. \$12.80
- B. \$6.16
- C. \$1.28
- D. \$0.13

8. What are the coordinates of point J on the graph below?

- A. (4, 5)
- B. (9, 2)
- C. (6, 3)
- D. (8, 1)

9. Convert into kilometres 17000 m.

- A. 170
- B. 17
- C. 1.7
- D. 1700

10. What is the sector of a circle?

- A. The diameter of the circle
- B. The perimeter of the circle
- C. A region bounded by an arc of the circle and two radii drawn to the endpoints of the arc
- D. The length of the circle

11. What are the coordinates of point I on the graph below?

- A. (7, 8)
- B. (1, 2)
- C. (3, 4)
- D. (5, 6)

12. Which graph would you use to display the frequency distribution of numerical data?

- A. Line graph
- B. Bar graph
- C. Pie chart
- D. Histogram

13. What is the place value of digit 7 in the number 3470268?

- A. Hundred thousands
- B. Thousands
- C. Ten thousand
- D. Seventy thousands

14. Which shape has the largest volume: cube, cone, or cylinder?

- A. Cylinder
- B. Cone
- C. They all have the same volume
- D. Cube

15. What is the solution to the linear equation  $3(x - 1) = 2(x + 4)$ ?

- A.  $x = 8$
- B.  $x = 7$
- C.  $x = 6$
- D.  $x = 5$

16. If  $x = -3$ , which inequality is true?

- A.  $2x \geq -5$
- B.  $x + 3 \geq 0$
- C.  $4x < -12$
- D.  $3x > -10$

17. Which of the following is the longest unit of length?

- A. Kilometer
- B. Meter
- C. Centimeter
- D. Millimeter

18. If a car travels 60 kilometers in 2 hours, what is the speed of the car?

- A. 30 km/h
- B. 15 km/h
- C. 25 km/h
- D. 20 km/h

19. Convert 5000000 cubic centimetres into cubic metres.

- A. 50
- B. 5000
- C. 500
- D. 5

20. What is the total value of 2 five-hundred-shilling notes and 4 ten-shilling coins?

- A. 520 Ksh
- B. 100 Ksh
- C. 1040 Ksh
- D. 1000 Ksh

21. If 5 kg of sugar costs Ksh. 200, how much will 3 kg of sugar cost?

- A. Ksh. 180
- B. Ksh. 140
- C. Ksh. 160
- D. Ksh. 120

22. What is the 2806198 rounded off to the nearest tens?

- A. 2806210
- B. 2806208
- C. 2806190
- D. 2806200

23. What is the formula for finding the area of a triangle?

- A. Base x Height
- B. Base  $\cdot$  Height
- C. Base - Height
- D. Base + Height

24. What is the probability of choosing a red ball from a bag containing 5 red balls, 3 blue balls, and 2 green balls?

- A.  $1/2$
- B.  $2/5$
- C.  $3/10$
- D.  $3/5$

25. If a car travels at a speed of 50 km/h, how long will it take to cover a distance of 200 kilometers?

- A. 5 hours
- B. 4 hours
- C. 2 hours
- D. 3 hours

26. How many variables are in the equation?  
 $7y + 2x + 8 = 29$

- A. 5
- B. 3
- C. 2
- D. 4

27. What is the length of the longest side of a triangle given the other two sides as 3cm and 4cm?

- A. 7 cm
- B. 6 cm
- C. 10 cm
- D. 5 cm

28. An airplane flies 56 miles due north and then 33 miles due east. How many miles is the plane from its starting point?

- A. 89 miles
- B. 65 miles
- C. 45.4 miles
- D. We don't have enough information.

29. Which of the following is a solution to the linear equation  $y = 2x + 3$ ?

- A. (1, 2)
- B. (3, 9)
- C. (2, 4)
- D. (4, 11)

30. What are the coordinates of point H on the graph below?

- A. (6, 1)
- B. (8, 6)
- C. (7, 5)
- D. (4, 3)

31. What is the result of adding 1.75 and 0.25?

- A. 2
- B. 2.75
- C. 3
- D. 2.5

32. Work out:  $0.18 \div 0.9$

- A. 0.2
- B. 2
- C. 0.02
- D. 0.002

33. What is the square root of 256?

- A. 16
- B. 14
- C. 18
- D. 20

34. If a pyramid has a volume of  $36\text{cm}^3$  and base area  $9\text{cm}^2$ , what is the height of the pyramid?

- A. 2cm
- B. 4cm
- C. 3cm
- D. 6cm

35. What are the coordinates of point K on the graph below?

- A. (4, 5)
- B. (1, 6)
- C. (6, 3)
- D. (2, 7)

36. Shannon is making identical balloon arrangements for a party. She has 32 maroon balloons, 24 white balloons, and 16 orange balloons. She wants each arrangement to have the same number of each color. What is the greatest number of arrangements that she can make if every balloon is used?

- A. 2
- B. 6
- C. 8
- D. 4

37. When constructing a parallelogram, what should be true about the opposite sides?

- A. Perpendicular
- B. Equal in length
- C. Parallel
- D. Not related

38. Solve  $2v-7=11$

- A.  $v=9$
- B.  $v=2$
- C.  $v=4$
- D.  $v=5$

39. If a right-angled triangle has sides of length 6, 8, and  $x$ , what is the length of  $x$  according to the Pythagorean relationship?

- A. 12 units
- B. 10 units
- C. 14 units
- D. 15 units

40. If a recipe calls for 2 cups of sugar to make 12 cookies, how many cups of sugar are needed to make 30 cookies?

- A. 3
- B. 4
- C. 6
- D. 5

41. Which decimal is equivalent to one-half?

- A. 0.75
- B. 0.2
- C. 0.25
- D. 0.5

42. The number of triangles in a polygon is?

- A.  $n$
- B. 3
- C.  $2-n$
- D.  $n-2$

43. What is the formula for finding the area of a trapezium?

- A. Side x Side
- B. Length x Width
- C.  $\text{Height} \times (\text{Base}_1 + \text{Base}_2)/2$
- D. Perimeter x Side

44. Which of the following is an example of a positive integer?

- A. -10
- B. 3
- C. 0
- D. -2

45. At what temperature do Fahrenheit and Celsius scales have the same value?

- A.  $100^{\circ}$
- B.  $0^{\circ}$
- C.  $50^{\circ}$
- D.  $-40^{\circ}$

46. What is the formula for the sector angle of a circle given the area of the sector and the radius?

- A.  $= r^2$
- B.  $= 2r$
- C.  $= \text{radius}/\text{area}$
- D.  $= \text{area}/\text{radius}$

47. Solve  $2a+1=3$

- A.  $a=6$
- B.  $a=2$
- C.  $a=4$
- D.  $a=1$

48. Which decimal is equivalent to four-fifths?

- A. 0.25
- B. 0.6
- C. 0.45
- D. 0.8

49. The bars used to count the frequencies are called\_\_\_\_\_

- A. Bars
- B. Range
- C. Tally Marks
- D. None of the above

50. Which of the following angles is greater than 180 degrees?

- A. Obtuse angle
- B. Reflex angle
- C. Acute angle
- D. Straight angle

