Myfuture CBC Revision

Mathematics - GRADE 9

Question Paper

1. What is the solution to the equation 6(x + 2) = 3x + 18?

A. x = 4

B. x = 5

C. x = 3

D. x = 6

2. Which unit of length is commonly used to measure the width of a notebook?

A. Millimeter

B. Meter

C. Kilometer

D. Centimeter

3. Solve -2c+1=15

A. c=3

B. c-2

C. c=-7

D. c=2

4. Solve -3c+8=-4

A. c=8

B. c=-4

C. c=4

D. c=0

5. Which shape has all its sides equal in length and all angles equal to 90 degrees?

A. Cylinder

B. Sphere

C. Cone

D. Cube

6. What is the main purpose of constructing an inscribed circle in a triangle?

A. To create a tangent to the sides

B. To find the circumcenter

C. To find the incenter

D. To divide the triangle into equal parts

7. Solve (9-5)×(15+8.03)-16.

A. 9232

B. 76.32

C. 92.32

D. 76.032

8. What is the product of the first 10 whole numbers?

A. 450

B. 3628800

C. 90

D. 500

9. Work the square root of 2209.

A. 23

B. 27

C. 47

D. 22

10. In a scale drawing, if the scale factor is 1:10 and the actual length of a line is 50 cm, what is the length of the corresponding line in the drawing?

A. 50 cm

B. 5 cm

C. 500 cm

D. 10 cm

11. Solve -2b-+(7)=-7

A. b=2

B. b=0

C. b=-0.1

D. b=10

12. What is the slope of a line parallel to the x-axis?

A. 3

B. 0

C. 2

D. 1

13. How do you calculate the area of a trapezoid?

A. Perimeter x Side

B. Length x Width

C. Height x (Base1 + Base2) / 2

D. Side x Side

14. The temperature on Sunday was -15o C. The temperature on Monday was 12 degrees less than the temperature on Sunday. What was the temperature on Monday?

A. -3o C

B. 3o C

C. 27o C

D. -27o C

15. Which operation would you do first in the following equation?
10 - 4 ÷ 1 . 5

A. Division

B. Subtraction

C. Multiplication

D. Addition

16. In this expression, 2x + 6y - 10, which are the coefficients?

A. -10

B. 2 and 6

C. 2, 6, and -10

D. x and y

17. What is 1/3 of 45?

A. 20

B. 18

C. 9

D. 15

18. What do we call ?

A. radical symbol

B. cube root

C. index

D. radicand

19. Which of the following is a graphical method of representing data?

A. Histogram

B. Regression analysis

C. T-test

D. Chi-square test

20. Chali bought a mattress for sh800.She later sold the mattress for sh1000.Calculate the percentage profit she made.

A. 40%

B. 60%

C. 25%

D. 20%

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

A. 100Â°

B. 50Â°

C. -40Â°

D. 0Â°

22. Which of the following equations represents a vertical line?

A. x = 5

B. 3y = 6x

C. y = x^2

D. y = 2x + 3

23. Which of the following is a perfect square?

A. 182

B. 156

C. 130

D. 196

24. Solve 2u+(-8)=-24

A. u=-9

B. u-6

C. u-1

D. u=-8

25. Form an algebraic expression from the statement below.
m divided by 3 .

A. 3m ÷ 1

B. m/3

C. 3 ÷ 3m

D. 3/m

26. If 12% of a number is 36, what is the number?

A. 300

B. 350

C. 200

D. 250

27. What is the square root of 4.5369?

A. 2.13

B. 21.3

C. 213.0

D. 0.213

28. The temperature drops 2°F each hour. What is the total change in temperature after 12 hours?

A. -26

B. 26

C. 24

D. -24

29. If you roll a fair six-sided dice twice, what is the probability of getting two 1s?

A. 1/72

B. 1/36

C. 1/12

D. 1/6

30. Which shape has a rounded surface with no straight edges or vertices?

A. Cone

B. Sphere

C. Cube

D. Cylinder

31. A car travels 200 miles in 3 hours and 20 minutes. Calculate the average speed of the car in mph.

A. 66 mph

B. 48 mph

C. 54 mph

D. 60 mph

32. What is the cube of 8?

A. 64

B. 80

C. 72

D. 88

33. Solve 2x-(-4)=0

A. x=12

B. x=-2

C. x=2

D. x=4

34. What is the diameter of a circle if the radius is 5 cm?

A. 25 cm

B. 15 cm

C. 5 cm

D. 10 cm

35. Which of the following numbers is a perfect square?

A. 61

B. 44

C. 52

D. 36

36. What is the key step in constructing a 60 degrees angle using a compass and a ruler?

A. Using a ruler to connect points

B. Placing the compass on the line

C. Measuring 60 degrees with a protractor

D. Drawing an arc

37. What is the sum of 1/4 and 1/3?

A. 7/12

B. 4/12

C. 3/5

D. 2/7

38. A runner completes 5 km in 25 minutes. What is the runner's speed in m/s (to two decimal places)?

A. 0.33 m/s

B. 2.08 m/s

C. 5.00 m/s

D. 3.33 m/s

39. What is the square root of 196?

A. 13

B. 15

C. 16

D. 14

40. What two integers is the square root of 48 between?

A. 6 and 7

B. 5 and 6

C. 7 and 8

D. 23 and 25

41. What is the result of 4.7 + 2.15?

A. 6.85

B. 7.85

C. 6.3

D. 8.85

42. The marked price of a shirt was sh2000.Kagwe bought it at sh1500.What was the discount?

A. sh400

B. sh500

C. sh250

D. sh3500

43. What is the cube of 5?

A. 50

B. 250

C. 20

D. 125

44. How do you calculate the area of a regular polygon?

A. Perimeter x Side Length

B. Perimeter x Apothem

C. Side Length x Side Length

D. Apothem x Side Length

45. In a scale drawing with a scale factor of 1:50, if a side of the drawing is 4 cm, what is the actual size of the object that it represents?

A. 2 cm

B. 200 cm

C. 50 cm

D. 25 cm

46. Which construction allows you to draw a line segment equal in length to a given line segment?

A. Drawing a perpendicular bisector

B. Drawing a square

C. Drawing a circle

D. Bisecting the line segment

47. Work out: 12Hm 9Dm 6m ÷ 3.

A. 3Hm 3Dm 2m

B. 3Hm 4Dm 2m

C. 5Hm 3Dm 2m

D. 4Hm 3Dm 2m

48. Chalo covered a distance of 10000 cm in 20 seconds.What was his speed?

A. 200000m/s

B. 0.5 m/s

C. 5cm/s

D. 5m/s

49. Simplify 30/54

A. 5/8

B. 4/9

C. 5/9

D. 6/11

50. Simplify the expression 4(2y - 3) + 5(2 + y).

A. 8y - 6 + 10 + 5y

B. 8y - 6 + 10 + y

C. 8y - 12 + 10 + y

D. 8y - 12 + 10 + 5y