



Myfuture CBC Revision

Mathematics - GRADE 9

Question Paper

1. What is the purpose of a scale factor in a scale drawing?

- A. To change the shape of the drawing
- B. To calculate the area of the drawing
- C. To determine the units of measurement
- D. To adjust the size of the drawing relative to the actual object

2. Convert the mixed number to a fraction: $5 \frac{3}{8}$

- A. $\frac{40}{8}$
- B. $\frac{38}{8}$
- C. $\frac{15}{8}$
- D. $\frac{43}{8}$

3. Halima made a profit of 25% after selling a dress for sh 500 and a 20% loss after selling a pair of shoes for sh 100. What was the total cost for the dress and the pair of shoes?

- A. sh 65
- B. sh 30
- C. sh 525
- D. sh 20

4. Solve the equation $6(x - 1) = 2x + 8$.

- A. $x = 5$
- B. $x = 2$
- C. $x = 3$
- D. $x = 4$

5. If you have $\frac{3}{4}$ of a cake and I have $\frac{7}{8}$ of a cake, who has more cake?

- A. Cannot be determined
- B. We have the same amount of cake
- C. I have more cake
- D. You have more cake

6. How do you calculate the area of a rhombus?

- A. Perimeter x Side
- B. Base x Height
- C. $\frac{\text{Diagonal}_1 \times \text{Diagonal}_2}{2}$
- D. Side x Side

7. Convert $5 \frac{1}{4}$ cubic metres into cubic centimetres.

- A. 5250
- B. 52500
- C. 5250000
- D. 525000

8. Solve $x + 5 > 7$

- A. $x > 12$
- B. $x > -12$
- C. $x > 2$
- D. $x > -2$

9. What is the reciprocal of $\frac{2}{3}$?

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

10. If a train travels at a speed of 150 km/hr for 2 hours, how far does it travel?

- A. 325 km
- B. 300 km
- C. 350 km
- D. 275 km

11. Which point is located at coordinates (5, 6)?

- A. Point B
- B. Point E
- C. Point D
- D. Point C

12. What is the probability of drawing a face card (Jack, Queen, King) from a standard deck of 52 playing cards?

- A. $\frac{1}{4}$
- B. $\frac{1}{13}$
- C. $\frac{3}{13}$
- D. $\frac{1}{3}$

13. Solve $2a+9=11$

- A. $a=-1$
- B. $a=4$
- C. $a=1$
- D. $a=7$

14. A mathematical lesson took $\frac{2}{3}$ hours. How long did the lesson take in minutes?

- A. 40
- B. 33
- C. 120
- D. 30

15. Solve $-2y+4=24$

- A. $y=-9$
- B. $y=-6$
- C. $y=-4$
- D. $y=-10$

16. A school has a male teachers, b female teachers, c boys and d girls. How many people are in the school altogether?

- A. $ab+cd$
- B. $a+b+c+d$
- C. $abcd$
- D. $abc+d$

17.has 5 sides.

- A. Octagon
- B. Hexagon
- C. Pentagon
- D. Triangle

18. The volume of a cuboid is $3\frac{1}{2}$ cubic metres. What is the volume of the cuboid in cubic centimetres?

- A. 350000
- B. 3500000
- C. 320000
- D. 3100000

19. What is the result of 11 squared?

- A. 131
- B. 121
- C. 111
- D. 110

20. Solve $2y-9=-19$

- A. $y=-5$
- B. $y=4$
- C. $y=5$
- D. $y=19$

21. Form a compound inequality using the inequalities below:

$$n > 2 \text{ and } n \leq 7$$

- A. $2 < n \leq 7$
- B. $2 > n \leq 7$
- C. $2 < n \geq 7$
- D. $7 < n \leq 2$

22. What is the square root of 0.04?

- A. 0.02
- B. 0.08
- C. 0.0016
- D. 0.2

23. The probability of an event always lies between _____

- A. 0 and 1
- B. None of the above
- C. 2 and 3
- D. 1 and 2

24. Chali bought a mattress for sh800. He later sold the mattress for sh1000. Calculate the profit he made.

- A. sh200
- B. sh600
- C. sh1800
- D. sh1200

25. Solve $3x - (-7) = 25$

- A. $x=2$
- B. $x=1$
- C. $x=6$
- D. $x=-2$

26. Which of the following are units used to calculate the volume of a cube?

- A. $s \times s \times s$
- B. $s \times s \times h$
- C. $1/2 \times b \times h$
- D. $l \times w \times h$

27. Which inequality represents the statement 'a number is less than 9'?

- A. $x < 9$
- B. $x \leq 9$
- C. $x \geq 9$
- D. $x > 9$

28. Which fraction is larger, $4/9$ or $3/7$?

- A. They are equal
- B. Cannot be determined
- C. $3/7$
- D. $4/9$

29. If 10 workers can build a bridge in 30 days, how many workers are needed to build the same bridge in 20 days?

- A. 18 workers
- B. 15 workers
- C. 30 workers
- D. 25 workers

30. What is $3/6$ simplified to its lowest terms?

- A. $4/6$
- B. $1/2$
- C. $2/6$
- D. $3/6$

31. How many milliliters are in half a liter?

- A. 750 ml
- B. 500 ml
- C. 1000 ml
- D. 250 ml

32. What units do we use to show area?

- A. cubed units
- B. squared units
- C. Metres
- D. units

33. What is the value of 5 to the power of 3?

- A. 15
- B. 100
- C. 20
- D. 125

34. Which of the following units cannot be used to represent speed?

- A. metres per second
- B. centimetres per seconds
- C. litres per second
- D. kilometres per hour

35. Which number is divisible by 2?

- A. 147
- B. 47
- C. 49
- D. 420

36. What is the correct way to construct a line segment equal in length to a given line?

- A. Use a set square or ruler
- B. Use a protractor to measure the angle
- C. Draw arcs with a compass
- D. Draw a perpendicular line

37. What is the magnification factor for a scale drawing with a scale of 1:5?

- A. 1.25
- B. 5
- C. 0.5
- D. 0.2

38. The lowest temperature on Thursday was -20°C. The lowest temperature on Saturday was -12°C. What was the difference between the lowest temperatures?

- A. 32°C
- B. 8°C
- C. 13°C
- D. 9°C

39. What is the value of log base 2 of 32?

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

40. Which of the following points lies on the line $y = 3x - 2$?

- A. (1, 0)
- B. (3, 9)
- C. (0, -2)
- D. (2, 4)

41. Find the missing numerator:
 $\frac{2}{3} = \frac{?}{9}$

- A. 7
- B. 4
- C. 6
- D. 9

42. What is the decimal value of three and five hundredths?

- A. 3.500
- B. 35.0
- C. 3.5
- D. 3.05

43. What is the formula for the volume of a sphere?

- A. $2r$
- B. r^2
- C. $\frac{4}{3}r^2$
- D. $\frac{4}{3}r^3$

44. Which solid has 4 faces, 5 vertices, and 6 edges?

- A. Pentagonal prism
- B. Cuboid
- C. Cylinder
- D. Octahedron

45. Which of the following is a rational number?

- A. $\frac{1}{3}$
- B. 7
- C. -3
- D. 2

46. How many millimeters are in a decimeter?

- A. 100 mm
- B. 10 mm
- C. 1 mm
- D. 1000 mm

47. Multiply 7 Hm 3 Dm 2 cm by 3.

- A. 9Hm 49Dm 6cm
- B. 49Hm 9Dm 6cm
- C. 49Hm 10Dm 6cm
- D. 40Hm 9Dm 6cm

48. Convert into $^{\circ}\text{C}$ 12 K.

- A. 283°C
- B. -261°C
- C. 261°C
- D. -283°C

49. Work the square of 0.28.

- A. 0.0784
- B. 0.784
- C. 7.84
- D. 0.00784

50. ABC is a right triangle. AC is its hypotenuse. Length of side AB is 25. Side BC is twice of side AB. Find the length of AC.

- A. 14
- B. 10
- C. 17
- D. 15

