



CREST Mental Maths Olympiad (CMMO)

Previous Year Paper

Class 6

Time Allowed: 60 minutes

Maximum Marks: 120

- There are a total of **100 questions** in this booklet comprising **2 sections** namely the **Basique and Avance** consisting of **80 questions (1 mark each) & 20 questions (2 marks each)**, respectively.
- There is **only ONE correct option** to a given question.
- No candidate is allowed to carry any textual material, printed or written, bits of paper, any electronic device, etc. inside the examination hall.
- The use of unfair means may result in the cancellation of the exam. Any such instances may be reported at **+91-98182-94134** or **info@crestolympiads.com**

DO NOT OPEN THIS BOOKLET UNTIL ASKED TO DO SO

FILL IN THE DETAILS

Candidate Name: _____

Class: _____ Section: _____

CREST ID: _____

Basique (Each Question is 1 Marks)

- How much time will Robert spend practicing the piano in 10 days, if he practices for $\frac{3}{4}$ of an hour each day?
 - 5 hours
 - 6.5 hours
 - 7.5 hours
 - 8 hours
- Identify the sequence which is in increasing order:
 - $10.05 < 10.35 < 10.53 < 10.5$
 - $10.5 < 10.53 < 10.35 < 10.05$
 - $10.05 < 10.35 < 10.5 < 10.53$
 - $10.53 < 10.05 < 10.5 < 10.35$
- Which of the following numbers are divisible by 14?
 - 35968
 - 47936
 - 57024
 - 87088
- What is the largest four-digit number that is divisible by 15, 25, 40, and 75?
 - 9600
 - 9700
 - 9800
 - 9900
- If there are 50 seats in a cinema hall and 60% of them are occupied, how many seats are empty?
 - 5 seats
 - 10 seats
 - 15 seats
 - 20 seats
- If a store had 100 items in stock and 20% of them were sold, how many items are left in the store?
 - 70
 - 80
 - 90
 - 100
- If a father's age is five times his son's age, and four years ago, the father was nine times older than his son, what is the father's current age?
 - 30 years
 - 36 years
 - 40 years
 - 48 years
- If Stalin earned \$14, \$16, \$18, \$20, \$22, \$24, and \$26 on consecutive days in a week, what is his average daily earning?
 - \$18
 - \$20
 - \$22
 - \$24

9. If 180 students are to be divided into three classes in the ratio of 3 : 4 : 5, how many students will be in each class?

- a. 20, 25, 35
- b. 15, 25, 40
- c. 45, 60, 75
- d. 30, 35, 40

10. How many degrees are there in a straight angle?

- a. 60°
- b. 90°
- c. 180°
- d. 360°

11. How many zeros are in the number 1 trillion?

- a. 8
- b. 10
- c. 12
- d. 14

12. What is the value of a number that contains 8 ones and has 2 less tens than the number of ones in it?

- a. 60
- b. 62
- c. 64
- d. 68

13. Fill in the blank:

_____ hundred thousand = 1 million

- a. 10000
- b. 1000
- c. 100
- d. 10

14. What is the sum of the first five natural numbers?

- a. 16
- b. 18
- c. 15
- d. 14

15. What is the nearest hundred of 243?

- a. 220
- b. 230
- c. 200
- d. 300

16. Estimate the following product to the nearest thousand 52×103 .

- a. 5050
- b. 5000
- c. 5203
- d. 5302

17. Simplify:

$$25 \div 5 \times [5 \times \{ 24 \div (18 - 15) \}]$$

- a. 220
- b. 200
- c. 230
- d. 210

18. Which of the fractions is the greatest fraction?

- a. 1
- b. 2
- c. 3
- d. 0

19. Fill in the missing number:

$$8870 \times 461 - 8870 \times 361 = \underline{\hspace{2cm}}.$$

- a. 870000
- b. 887900
- c. 889300
- d. 887000

20. Fill in the missing number:

$$10 - [100 - (89 + 5 \div 5)] = \underline{\hspace{2cm}}.$$

- a. 134
- b. 114
- c. 10
- d. 0

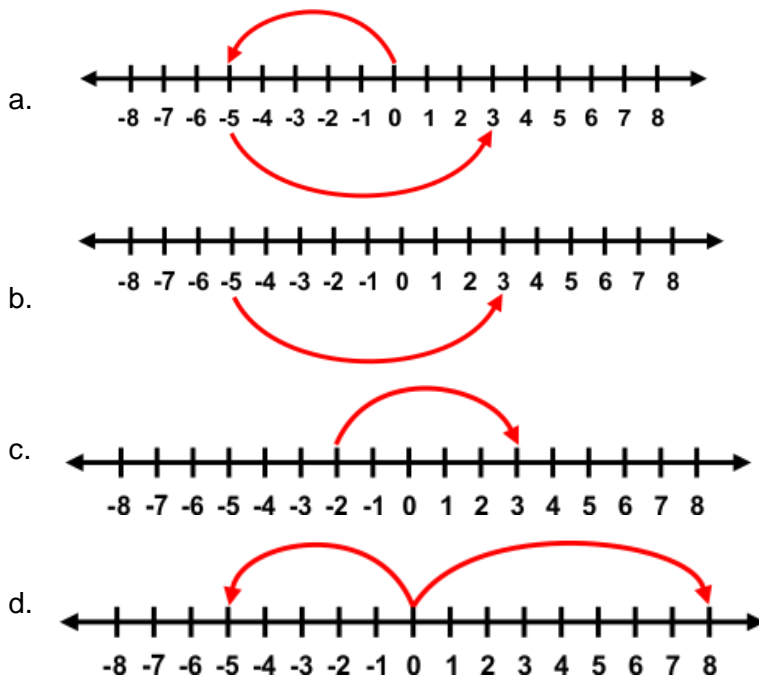
21. Fill the missing number:

$$\underline{\hspace{2cm}} \times 4 = 12 \times 20$$

- a. 70
- b. 60
- c. 65
- d. 75

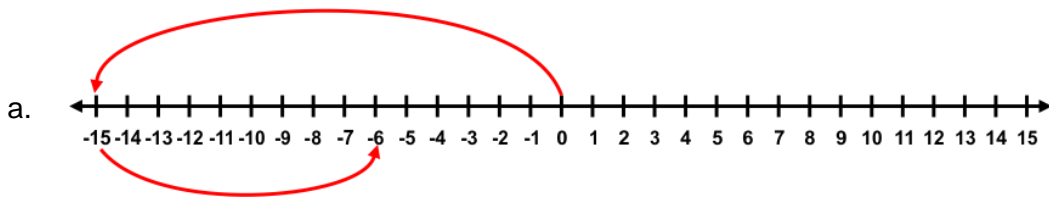
22. Use the number line and solve:

$$(-5) + 8$$



23. Use number line and add the following integers:

$$(-15) + 9$$



24. What will be the product $7 \times (-6)$?

- a. 42
- b. -42
- c. -32
- d. -24

25. Which integer when divided by -1 gives 101?

- a. 101
- b. -101
- c. 100
- d. -100

26. What fraction of the picture represents the shaded portion?



- a. $\frac{3}{8}$
- b. $\frac{2}{3}$
- c. $\frac{4}{5}$
- d. $\frac{1}{8}$

27. What is half of a right angle?

- a. 90°
- b. 45°
- c. 180°
- d. 65°

53. What is the shape of the book?

- a. Cube
- b. Cuboid
- c. Square
- d. Rectangle

54. Give the name of a polygon with three sides.

- a. Square
- b. Triangle
- c. Rhombus
- d. Circle

55. What is the name of a 3D shape with 6 square faces?

- a. Cone
- b. Cube
- c. Cylinder
- d. Square

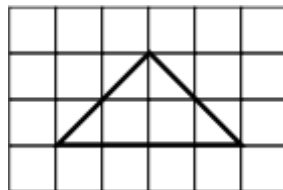
56. Find the perimeter of rectangle whose length = 5 cm, breadth = 50 cm.

- a. 55 cm
- b. 50 cm
- c. 105 cm
- d. 110 cm

57. Calculate the perimeter of the square of side 0.01 m.

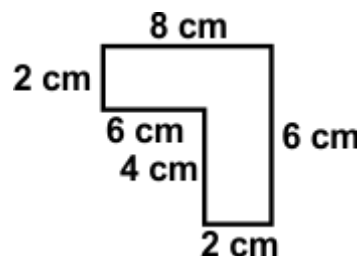
- a. 0.04 m
- b. 0.01 m
- c. 0.1 m
- d. 0.0001 m

58. Find the area of the figure by counting squares:



- a. 16 units
- b. 4 units
- c. 9 units
- d. 12 units

59. Find the perimeter of the figure: -



- a. 35 cm
- b. 43 cm
- c. 28 cm
- d. 18 cm

- a. i – 100, ii - 40
c. i – 50, ii - 80

- b. i – 50, ii - 50
d. i – 50, ii - 30

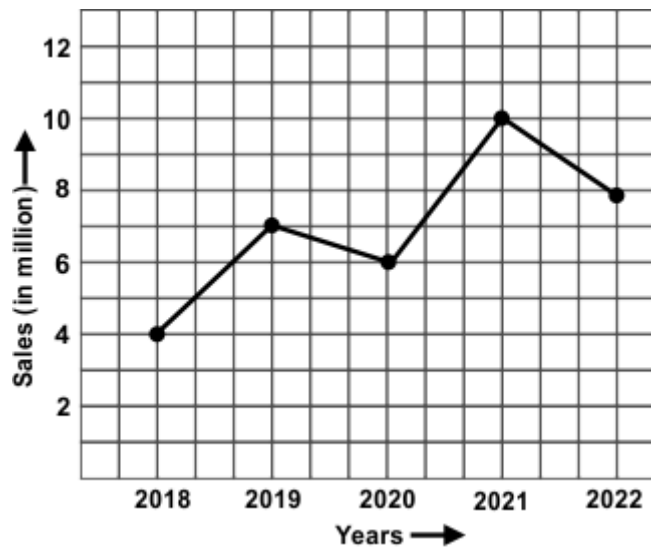
66. The line graph shows the yearly sales figure for a manufacturing company. What were the sales in (i) 2018 (ii) 2022?



- a. i – 2 million, ii - 6 million
c. i – 4 million, ii - 8 million

- b. i – 1 million, ii - 3 million
d. i – 8 million, ii - 3 million

67. The line graph shows the yearly sales figures of a manufacturing company. What were the sales in 2021?



- a. 5 million
c. 10 million

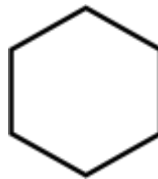
- b. 8 million
d. 7 million

68. Study the given pictograph and answer the questions:
- Which school has the greatest number of children?
 - How many children in all are there in four schools?



☺ = 100 children

- a – school 1, b – 2200 children
 - a – school 2, b – 1200 children
 - a – school 4, b – 2200 children
 - a – school 3, b – 220 children
69. Find the number of lines of symmetry shape:



- 6 lines
 - 4 lines
 - 8 lines
 - 2 lines
70. Given here is a figure of a folded sheet and a design drawn about the fold. Select the complete figure that would be seen when the design is cut off.



-
-
-
-

71. A bus takes 3 hours to travel a distance of 180 km. What is the speed of the bus?
- 70 km/h
 - 50 km/h
 - 90 km/h
 - 60 km/h

86. Compare the values of the following fractions, use symbols to indicate the result:

$$\frac{2}{3}, \frac{2}{5}, \frac{2}{9}$$

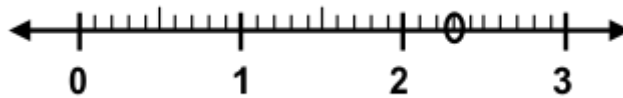
a. $\frac{2}{3} > \frac{2}{5} > \frac{2}{9}$

b. $\frac{2}{3} < \frac{2}{5} > \frac{2}{9}$

c. $\frac{2}{3} < \frac{2}{5} < \frac{2}{9}$

d. $\frac{2}{3} > \frac{2}{5} = \frac{2}{9}$

87. Choose the correct decimal from the given number line:



- a. 2.3
c. 2.7

- b. 4.5
d. 2.4

88. Fill in the blank:

The quotient of x and y added to four times the product of x and y is _____.

- a. $x/y + 4y$
c. $x + 6y$

- b. $2x/y + 34$
d. $x/y + 4xy$

89. Which of the following numbers is divisible by 11?

37468, 21358, 354872, 82907

- a. 354872
c. 21358

- b. 37468
d. 82907

90. If the measurements of sides are 2 cm, 2 cm, 2 cm, and measure of angles of the triangle are 60° , 60° , and 60° then what type of triangle is this?

- a. Right angle triangle
c. Scalene triangle

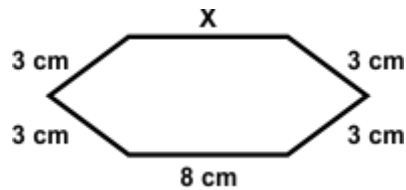
- b. Isosceles triangle
d. Equilateral triangle

91. In triangle ABC, angle A measures 60° and angle B measures 90° . What is the measure of angle C?

- a. 60°
c. 30°

- b. 40°
d. 45°

92. The perimeter of the given figure is 26 cm. Find the length of x.

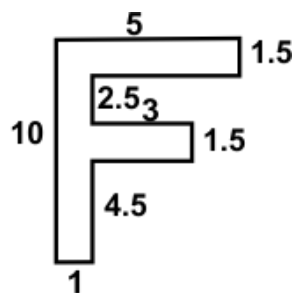


- a. 8 cm
- b. 6 cm
- c. 9 cm
- d. 11 cm

93. The side of a square tile is 10 cm. How many tiles can be fixed on one side of a wall which is 300 cm long and 200 cm high?

- a. 800
- b. 700
- c. 900
- d. 600

94. Find the area of the figure (taking the unit in cm).



- a. 20.5 cm²
- b. 24 cm²
- c. 23.1 cm²
- d. 23.23 cm²

95. Name the figure which has six faces and equal edges.

- a. Cylinder
- b. Cone
- c. Cuboid
- d. Cube

