Syllabus for CMO is available at https://www.crestolympiads.com/cmo-syllabus

Pattern And Marking Scheme

Class	Topic/Section	No. of Questions	Marks per Questions	Total Marks
1st to 4th	Practical Mathematics	25	1	25
	Achiever's Section	10	2	20
	Grand Total	**35**	-	**45**
5th to 10th	Practical Mathematics	40	1	40
	Achiever's Section	10	2	20
	Grand Total	**50**	-	**60**

1. The length, breadth and height of a room are 1050 cm, 750 cm and 425 cm, respectively. Find the length of the longest tape which can measure all the three dimensions of the room exactly:
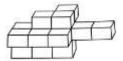
   (a) 15 cm   (b) 25 cm
   (c) 50 cm   (d) 75 cm

2. 50 chairs and 30 blackboards were purchased for a school. If each chair costs Rs. 1065 and each blackboard costs Rs. 1645, then find the total amount of the bill:

   (a) Rs. 102,060   (b) Rs. 106,500
   (c) Rs. 120,650   (d) Rs. 102,600

3. The solid below is made up of cubes. How many cubes are required to make the given solid?
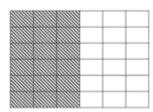

   (a) 14   (b) 16
   (c) 18   (d) 19

4. The figure shown below is shaded to represent a fractional number:

How many of the stars in the group below must be shaded to represent a fraction with the same value?
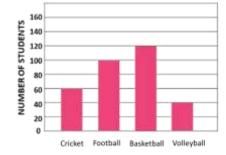

(a) 5   (b) 6

(c) 8   (d) 10

5. A bag contains 25-paise and 50-paise coins whose total value is Rs. 30. If the number of 25-paise coins is four times that of 50-paise coins, then find the number of each type of coins:

(a) 40 and 30   (b) 20 and 40

(c) 80 and 20   (d) 60 and 20

6. Abhishek surveyed the students of his school to determine their favourite sport. The results are shown below in the graph.
How many more students like basketball than cricket?

(a) 60   (b) 40

(c) 120   (d) 20

2

7. Which of the following statements is incorrect?

(a) Each diagonal of quadrilateral divides it into two triangles.
(b) A quadrilateral has two diagonals.
(c) A quadrilateral can have at most three angles.
(d) Each side of a quadrilateral is less than the sum of remaining three sides.

8. The sides of a right-angled triangle are 2a cm, 2a + 2 cm and (4a – 2) cm long. What is the length of the shortest side of the triangle if its perimeter is 24 cm?

(a) 8 cm (b) 10 cm
(c) 3 cm (d) 6 cm

Achiever's Section

9. Which of the following properties is incorrect with respect to the properties of whole numbers?

(a) Addition and subtraction are commutative.
(b) Division by 0 is not defined.
(c) Multiplication is distributive over addition.
(d) They are closed under addition and multiplication.

10. Study the steps of construction given below:
Step I: Draw a ray OA.
Step II: With O as centre and any convenient radius draw an arc MN to cut ray OA at M.
Step III: With M as centre and the same radius draw an arc to cut MN at P.
Step IV: With P as centre and the same radius draw an arc to cut MN at Q.
Step V: Draw OQ and produce it to D. An angle AOD is constructed.

Which is the measure of $\angle AOD$?

(a) 60° (b) 30°
(c) 120° (d) 45°

3

Answers

1. (b), 2. (d), 3. (a), 4. (b), 5. (c), 6. (a), 7. (c), 8. (d), 9. (a), 10. (c).