CREST Olympiads

SAMPLE PAPER

CREST Mathematics Olympiad (CMO)

CLASS 5

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
	Practical Mathematics	25	1	25
1st to 4th	Achiever's Section	10	2	20
	Grand Total	**35**	-	**45**
	Practical Mathematics	40	1	40
5th to 10th	Achiever's Section	10	2	20
	Grand Total	**50**	-	**60**

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1. Abhishek has prepared some sets of numbers which have been given below. Which one of the following sets is the set of integers?

(a) {0, 1, 2, 4, 8, 16, 32}
(b) {3, 6, 9, 12, 15}
(c) {-4, -3, -2, -1, 0, 1, 2, 3, 4}
(d) All of these

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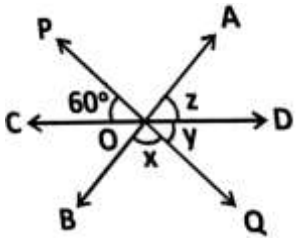
2. In the figure, ∠x is 2/3 of ∠y. AB, PQ and CD are straight lines. How would you express ∠x as a fraction of ∠z?



(a) 1/3
(b) 2/3
(c) 1/2
(d) 3/5

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3. Ram can throw a ball 50 $^{3}/_{5}$ feet. Shyam can throw the same ball 48 $^{1}/_{3}$ feet. How much farther can Ram throw the ball than Shyam?

(a) 2 $^{2}/_{15}$ feet
(b) 2 $^{4}/_{15}$ feet
(c) 2 $^{3}/_{5}$ feet
(d) 2 $^{4}/_{5}$ feet

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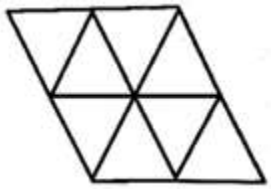
4. How many triangles are there in the following figure?



(a) 8
(b) 9
(c) 10
(d) 12

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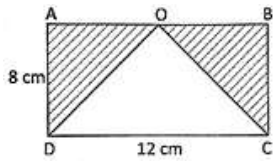
5. In the following figure, ABCD is a rectangle. If O is the mid-point of the side AB, find the area of the shaded region:



(a) 40 cm^2
(b) 48 cm^2
(c) 56 cm^2
(d) 60 cm^2

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6. Read the following sentences carefully:

I. A set of points which lie on the same line are called collinear points.
II. A set of points at different distances from a fixed point is a circle.
III. A set of points which do not lie on the same line are called non-collinear points.

Which of the following is true?

(a) Only (I)
(b) Only (II)
(c) Only (I) and (III)
(d) Only (II) and (III)

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7. If Jina reads 90 pages a day, it will take her more than 4 days to finish reading a book. If she reads 80 pages a day, she will take less than 5 days. If the number of days Jina takes to finish reading is the same as the number of pages she reads every day, how many pages she must read every day?

(a) 15
(b) 18
(c) 19
(d) 21

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8. The table shows the number of students in five classes. Each student donated Rs. 255 to the foundation. How much money did they donate in total?

Class	1st	2nd	3rd	4th	5th
Number of Students	39	47	59	43	69

(a) Rs. 65,535
(b) Rs. 45,890
(c) Rs. 73,655
(d) Rs. 59,905

Achiever's Section

9. There are 3 numbers. The third number is the greatest. When the third number is divided by the second number, the quotient is 4. The difference between the second and third number is 654. If first number is 109 more than the second number, then find the first number:

(a) 109
(b) 327
(c) 218
(d) 872

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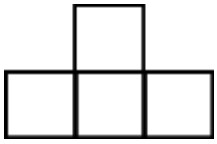
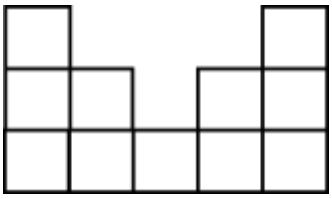
10. Figures A and B are made up of identical squares. If the perimeter of Figure A is 25 cm, what is the perimeter of Figure B?



A



B

(a) 25 cm
(b) 50 cm
(c) 100 cm
(d) None of the above

Answers

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