

SAMPLE PAPER

CLASS

CREST Mathematics Olympiad (CMO)

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

- A bucket contains 20 ¹/₄ litre of water. A small jug has a capacity of 3/4 litre. How many times the jug has to be filled with water from the bucket to get it emptied?
 (a) 15
 (b) 17
 (c) 27
 (d) 31
- 2. Each side of a polygon is 2.9 m in length and its perimeter is 17.4 m. How many sides does the polygon have?

(a) 6	(b) 9
(c) 11	(d) 13

3. In a caravan, in addition to 50 hens there are 45 goats and 8 camels with some keepers. If the total number of feet be 224 more than the number of heads, then find the number of keepers.

(a) 19	(b) 17
(c) 16	(d) 15

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4. A businessman man sells shirts at a profit of 12 $\frac{1}{2}$ % and invests the proceeds to buy pants which he sells at a profit of 20%. If he makes a net profit of Rs. 700, then find the cost of the shirts.

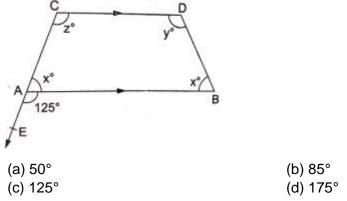
(a) Rs. 2300	(b) Rs. 2000
(c) Rs. 2500	(d) Rs. 2400

5. The simple interest on a certain sum for 3 years at 8% per annum is Rs. 96 more than the simple interest on the same sum for 2 years at 9% per annum. Find the sum. (a) Rs. 4800 (b) Rs. 3200

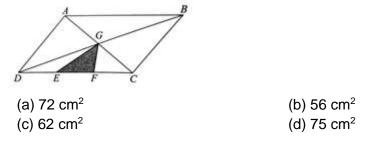
(c)	Rs.	2400	

(d) Rs. 1600

6. In the given figure, AB||CD and CA has been produced to E so that $\angle BAE = 125^{\circ}$. If $\angle BAC = x^\circ = \angle ABD$, $\angle BDC = y^\circ$ and $\angle ACD = z^\circ$, then find the value of y.



7. In the following figure, ABCD is a parallelogram. The area of triangle EFG is equal to 6 cm^2 and DE = EF = 1/3 of CD. Find the area of parallelogram ABCD.



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- 8. A rectangular ground is 90 m long and 32 m broad. In the middle of the ground there is a circular tank of radius 14 m. Find the cost of turfing the remaining portion at the rate of Rs. 50 per square.
 - (a) Rs. 1,1320

(c) Rs. 125,650

(b) Rs. 113,200 (d) Rs. 15,800

Achiever's Section

- 9. (A) the quotient of two integers is always a rational number.
 - (B) 1/0 is not rational.
 - Which of the above statements is true?
 - (a) A is true and b is the correct explanation of A.
 - (b) A is true and B is false.
 - (c) A is false and B is the correct explanation of A.
 - (d) Both A and B are false.
- 10. The measurements of the triangle DEF are given below -
 - EF = 8.4 cm, \angle E = 103° and \angle F = 85°. Which of the above statements is true?
 - (a) Triangle DEF can be constructed.
 - (b) It is an obtused angled triangle.
 - (c) It is an acute angled triangle.
 - (d) Triangle DEF can not be constructed.

Answers

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