



CREST Mathematics Olympiad (CMO)  
Previous Year Paper (2021-22)

**Class 4**

**Time Allowed: 1-hour**

**Maximum Marks: 45**

- Additional **10 minutes** will be allotted to fill up information on the OMR Sheet, before the start of the exam.
- Fill in all the mandatory fields clearly on the OMR Sheet.
- There are **2 sections** in the question paper namely the **Practical Mathematics & Achievers' Section** consisting of **25 questions (1 mark each) & 10 questions (2 marks each)**, respectively.
- There is no negative marking. The use of a calculator is not permitted.
- There is **only ONE correct option** to a given question.
- Use **HB Pencil or Blue / Black ball point pen only** for marking the correct choice of answers on the OMR Sheet.
- Rough work is to be done in the space provided in the test booklet. Extra plain sheet may be provided by the school for the rough work.
- The OMR Sheet is to be handed over to the invigilator at the end of the exam.
- 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**

Student Name: \_\_\_\_\_

Class: \_\_\_\_\_ Section: \_\_\_\_\_

Enrollment No: \_\_\_\_\_

## Practical Mathematics (Each Question is 1 Mark)

1. Fill in the blank:

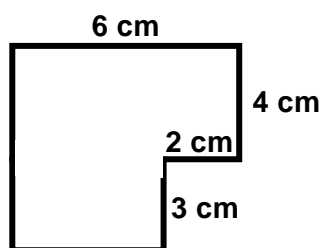
The sum of LXVIII and XLIX is \_\_\_\_\_

- a. CXXVIII  
b. CXIX  
c. CXVIII  
d. CXVII

2. Jessy had 65 pens. Out of which she gave one-fifth to Ruby. Out of the remaining, she donated one-fourth for charity. How many pens were left with her?

- a. 13  
b. 24  
c. 36  
d. 39

3. Find the perimeter of the given figure:



- a. 15 cm  
b. 21 cm  
c. 26 cm  
d. 30 cm

4. Fill in the blank:

The difference of CDXXXVII and DLXVIII is \_\_\_\_\_

- a. CXI  
b. CXXI  
c. CXXXI  
d. CXXXXI

5. Which of the following statements is incorrect?

- a. 1, 2, 3, 4, 6 and 12 are the factors of 12.  
b. HCF of 12 and 20 is 4  
c. HCF of 12 and 42 is 12  
d. LCM of 32 and 48 is 96

6. A fashion designer uses one-seventh portion of a cloth to make a ribbon. If the cloth is 5 m 11 cm long, then find the size of one ribbon:

- a. 73 cm  
b. 77 cm  
c. 81 cm  
d. 85 cm

7. Following is the schedule of trains arriving and departing from a station:

Train Name	Arrival time	Departure time
A	10:15 AM	10:25 AM
B	10:35 AM	10:45 AM
C	11:20AM	11:35 AM
D	11:55 AM	12:05 PM

Robert reached the station at 10:10 AM but waits for his friend Gilly to arrive so that they can board the train together. If Gilly arrives at 11:40 AM, in which train will they board?

- a. Train A  
c. Train C
- b. Train B  
d. Train D
8. A 2 L bottle of luxury drink is thrice as expensive as the 250 mL luxury drink can. If the cost of the bottle of luxury drink is \$231, the find the cost of the 250 mL luxury drink can?
- a. \$77  
c. \$693
- b. \$234  
d. \$703
9. Robert's mother pays the chef \$250 per week. For one particular week in the month of February, the chef was irregular, and his mother cut \$100 from his payment for that week. How much did she pay the chef in the month of February 2018?
- a. \$750  
c. \$870
- b. \$800  
d. \$900
10. Which of the following is the correct expanded form of 79,707?
- a. 70,000 + 9,000 + 700 + 70  
c. 70,000 + 9,000 + 700 + 7
- b. 79,000 + 700 + 74  
d. 870,000 + 9,000 + 70 + 7
11. Fill in the blank:  
CCLXIV ÷ XXIV = \_\_\_\_\_
- a. XIII  
c. IX
- b. XI  
d. XII
12. Which of the following is not a prime number?
- a. 71  
c. 69
- b. 79  
d. 97

13. Which number will replace the '?' in the question figure given below?

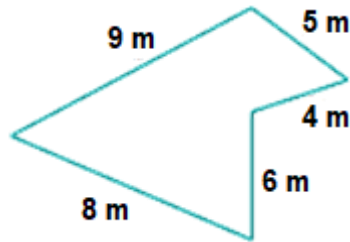


- a. 1  
c. 5
- b. 4  
d. 7

14. The temperature in city A is three-seventh of the temperature of city B. If temperature in city B is 21°C, then find the temperature in city A:

- a. 3°C  
c. 9°C
- b. 7°C  
d. 13°C

15. Find the perimeter of the given figure:

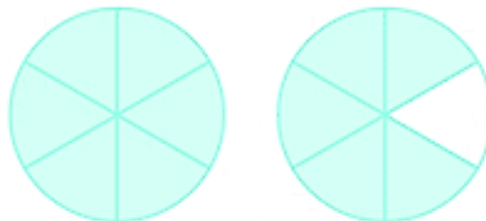


- a. 26 m  
c. 32 m
- b. 28 m  
d. 36 m

16. Which of the following options has only prime numbers?

- a. 53, 59, 61, 79  
c. 23, 47, 63, 71
- b. 51, 67, 79, 97  
d. 17, 23, 51, 79

17. Express the following picture as mixed fraction and find their sum:



- a.  $1\frac{1}{6}$   
c.  $1\frac{1}{5}$
- b.  $1\frac{5}{6}$   
d.  $1\frac{5}{11}$

18. If the length of each side of a hexagon is 'a' unit and its all sides are equal, then find its perimeter?

- a. 5a units
- b. 6a units
- c. 7a units
- d. 8a units

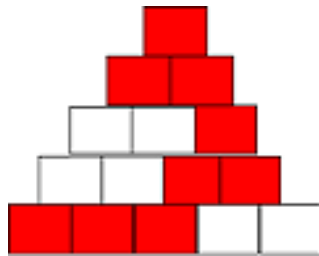
19. Which of the following is matched correctly?

- a. CCXXXVII - 247
- b. CCCXLV - 365
- c. CDXXVIII - 428
- d. CCCXXXIV - 394

20. What is the difference between the smallest number and largest number formed by the digits 0, 1, 3, 5, 7 and 8?

- a. 771,732
- b. 772,742
- c. 774,764
- d. 775,846

21. Express the shaded part of the image in fraction:



- a.  $\frac{7}{15}$
- b.  $\frac{3}{5}$
- c.  $\frac{11}{15}$
- d.  $\frac{13}{15}$

22. A 12 L bucket has only 3 L 725 mL of water filled in it. What fraction of the bucket is filled with water?

- a.  $\frac{61}{120}$
- b.  $\frac{73}{320}$
- c.  $\frac{149}{480}$
- d.  $\frac{765}{2469}$

23. Which of the following digits will be at tens place in the sum of 22 tens and 14 hundreds 10 tens 12 ones?

- a. 300
- b. 30
- c. 3
- d. 20

24. A diver is at a depth of 9 m. At the same time, a balloon is at a height of 20 m from the ground. Find the distance between them:

- a. 10 m
- b. 11 m
- c. 29 m
- d. 14.5 m

**25.** Aman is a weightlifter. He weighs 70.5 kg and can lift 15 kg more than his own weight. Last week, he broke his personal record and lifted 4 kg even more than his personal best. How much weight did he lift last week?

- a. 85.5 kg  
c. 90 kg

- b. 89.5 kg  
d. 100 kg

## Achiever's Section (Each Question is 2 Marks)

**26.** Match the following:

Column I		Column II	
1.	24 thousands 42 hundreds 31 tens and 2 ones	i.	27,435
2.	22 thousands 54 hundreds 21 tens and 4 ones	ii.	27,614
3.	23 thousands 42 hundreds 23 tens and 5 ones	iii.	28,512

- a. 1 - iii, 2 - ii, 3 - i  
c. 1 - iii, 2 - i, 3 - ii

- b. 1 - ii, 2 - iii, 3 - i  
d. 1 - i, 2 - ii, 3 - iii

**27.** Match the following:

Column I		Column II	
1.	68 thousands 21 hundreds 12 tens and 5 ones	i.	63,279
2.	59 thousands 41 hundreds 17 tens and 9 ones	ii.	46,382
3.	42 thousands 42 hundreds 18 tens and 2 ones	iii.	70,225

- a. 1 - iii, 2 - ii, 3 - i  
c. 1 - iii, 2 - i, 3 - ii

- b. 1 - ii, 2 - iii, 3 - i  
d. 1 - i, 2 - ii, 3 - iii

**28.** The area of a square is 64 square cm. Find its perimeter:

- a. 24 cm  
c. 36 cm

- b. 32 cm  
d. 44 cm

**29.** Which of the following is the least in value?

- a. 14 thousands 15 hundreds 5 tens and 4 ones + 17 thousands 16 hundreds 3 tens and 2 ones  
b. 19 thousands 11 hundreds 4 tens and 4 ones + 12 thousands 15 hundreds 5 tens and 4 ones  
c. 22 thousands 10 hundreds 5 tens and 6 ones - 4 thousands 16 hundreds 9 tens and 8 ones  
d. 11 thousands 5 hundreds 4 tens and 7 ones + 6 thousands 4 hundreds 3 tens and 5 ones

**30.** The distance between Arav's school and library is 1 km 250 m and the distance between his home and school is 7 km 130 m. He goes from home to school and then school to library. He is back to school and returned home. Find the total distance covered by him:

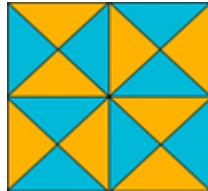
- a. 14 km 320 m  
c. 16 km 760 m

- b. 15 km 420 m  
d. 17 km 130 m

**31.** Which of the following is correctly arranged in ascending order?

- a. 420 seconds > 580 minutes > 1 day > 14 hours  
b. 420 seconds < 14 hours < 580 minutes < 1 day  
c. 580 minutes > 420 seconds > 1 day > 14 hours  
d. 420 seconds < 580 minutes < 14 hours < 1 day

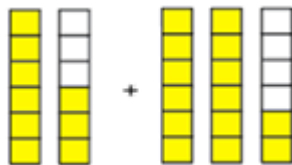
**32.** How many triangles are there in the picture?



- a. 32  
c. 40

- b. 36  
d. 44

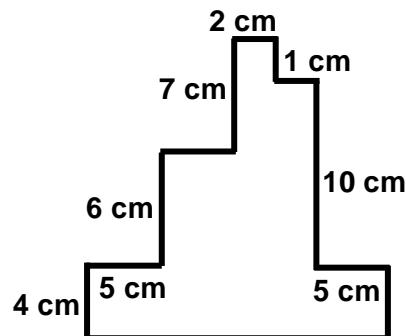
**33.** Express the following picture as mixed fraction and find their sum:



- a.  $2\frac{1}{6}$   
c.  $3\frac{1}{5}$

- b.  $3\frac{5}{6}$   
d.  $3\frac{1}{4}$

**34.** Find the perimeter of the given figure:



- a. 65 cm  
c. 96 cm

- b. 68 cm  
d. 138 cm

35. Find the value of P:



- a. 10
- c. 42

- b. 36
- d. 46



## Answer Key

1. d    2. d    3. c    4. c    5. c    6. a    7. d    8. a    9. d    10. c  
11. b    12. c    13. a    14. c    15. c    16. a    17. b    18. b    19. c    20. a  
21. b    22. c    23. c    24. c    25. b    26. a    27. c    28. b    29. c    30. c  
31. d    32. d    33. b    34. b    35. b