

International Math Olympiad Sample Paper Grade 2

FREE IMO Pack
worth Rs 7000

**Book a trial
class to avail**



“

Cuemath is India's #1 math learning program for KG-10th class kids. Our proprietary learning methodology ensures children visualise, learn & become critical thinkers for jobs of the future.

-Manan Khurma, Cuemath Founder & CEO

”

IMO 2019 - GRADE 2

SAMPLE PAPER









LOGICAL REASONING

1. Raj enrolled in swimming classes on 11th March 20XX. He practices for 11 days and left for a trip for 3 days. He came back and again practices for 2 days. His practice finishes on-

MARCH						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- (A) 23rd March
 (B) 28th March
 (C) 26th March
 (D) 27th March

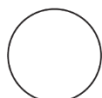
2. Find the missing figure

		
		
	?	

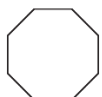
(A)



(B)



(C)



(D)



3. Neha has more notebooks than Ruhi. Rashmi has less number of notebooks than Alyssa. Ruhi has more notebooks than Alyssa. Who has the most number of notebooks?

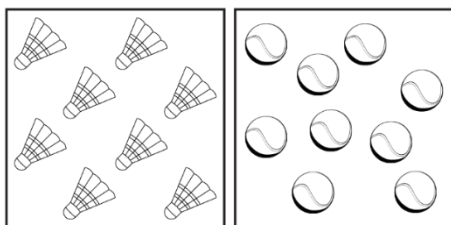
- (A) Alyssa
- (B) Ruhi
- (C) Neha
- (D) Rashmi

4. If today is Tuesday, what day it was the day before Yesterday?

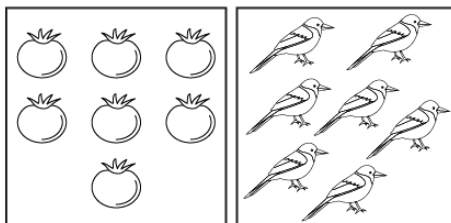
- (A) Sunday
- (B) Saturday
- (C) Monday
- (D) Friday

5. Which pair of cards have a sum of less than 15?

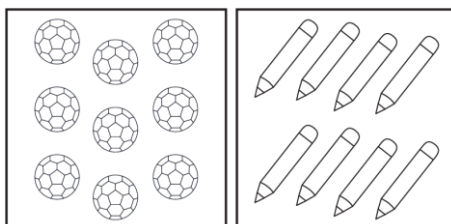
(A)



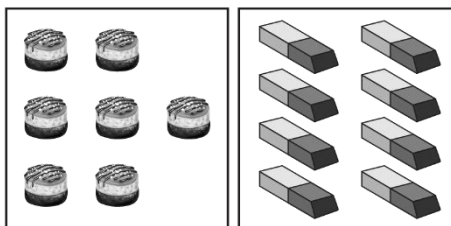
(B)



(C)



(D)

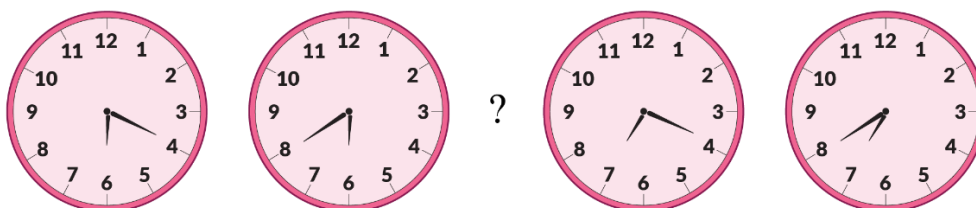


6. If all the vowels are removed from the given word, then _____ is the fifth letter from the right end.

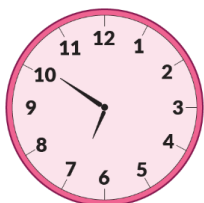
KNOWLEDGE

- (A) K
- (B) N
- (C) W
- (D) D

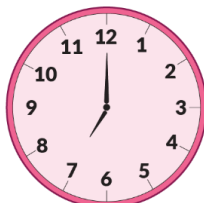
7. Find the missing clock if the given pattern on the clocks is followed.



- (A)



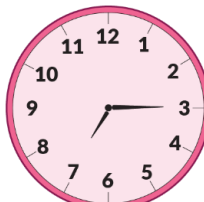
- (B)



- (C)



- (D)

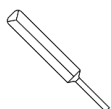


8. If  is called ,  is called ,  is called , 

is called  .

What is used by a batsman in cricket?

(A)



(B)



(C)



(D)

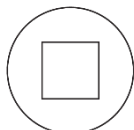


9. Find the odd one out.

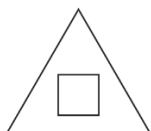
(A)



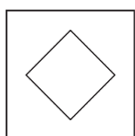
(B)



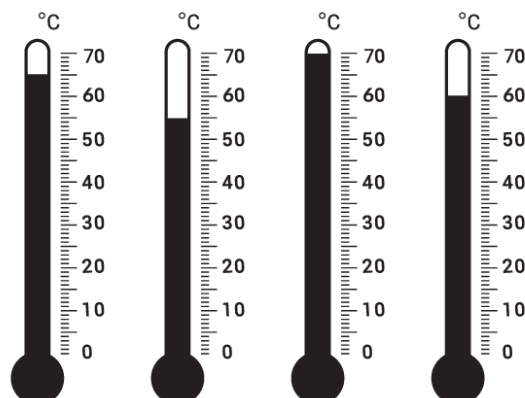
(C)



(D)



10. Which thermometer shows the lowest temperature?



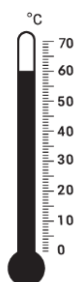
(A)



(B)



(C)

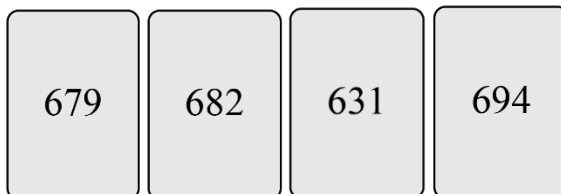


(D)




MATHEMATICAL REASONING

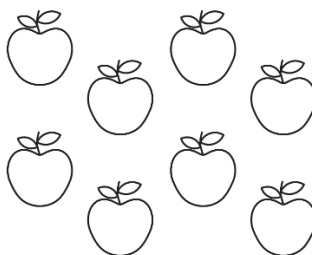
11. Which of the following correctly shows decreasing order of the following set of numbers?



- (A) 679, 682, 631, 694
- (B) 694, 682, 679, 631
- (C) 631, 682, 679, 694
- (D) 631, 679, 682, 694




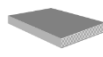
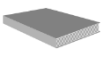
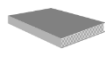
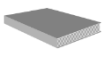

12. If  stands for 16, find the value of-



- (A) 28
- (B) 24
- (C) 32
- (D) 36

13. Which of the following is more than 17 tens and 6 ones?

- (A) 173
- (B) 167
- (C) 176
- (D) 177

14. If  +  = 3 tens and 4 ones,  +  +  = 18. Find the value of .

- (A) 24
- (B) 22
- (C) 20
- (D) 28

15. What is the missing number in the box?

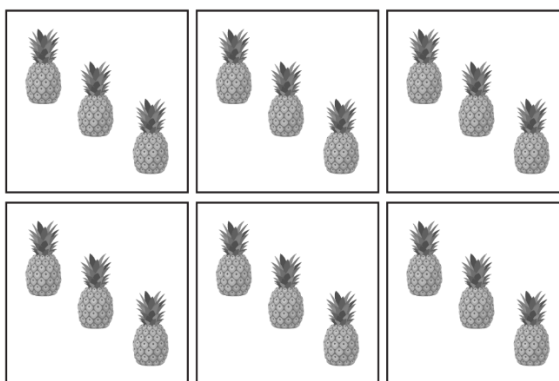
$$531 + 97 = \underline{\hspace{1cm}} - 89$$

- (A) 628
- (B) 727
- (C) 697
- (D) 717

16. 3 hundred 7 ones + 5 hundred 4 tens 3 ones = 8 hundred ___ tens ___ one

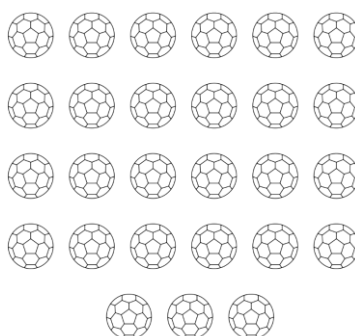
- (A) 4, 0
- (B) 1, 3
- (C) 5, 0
- (D) 4, 3

17. Which of the following options best describes the figure shown below:


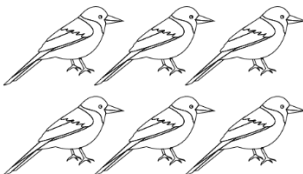


- (A) $3 + 6$
- (B) $9 + 3$
- (C) $3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3$
- (D) 3×6

18. How many groups of 3 footballs can be formed from the given number of footballs?



- (A) 7
- (B) 8
- (C) 9
- (D) 10

19. If  shows 12, what will be the value of  ?

(A) 60
 (B) 36
 (C) 48
 (D) 72

20. 71 more than 233 is-

(A) 3 hundred 4 ones
 (B) 30 hundred 4 ones
 (C) 3 hundred 4 tens
 (D) 30 hundred 40 tens

EVERYDAY MATHEMATICS

21. There are 111 chocolates in a box. Rahul took out 29 chocolates from the box. How many chocolates are still there in the box?

(A) 92
 (B) 82
 (C) 86
 (D) 96

22. A man had ₹329 in his purse. He had ₹ 461 in his pocket. How much more money he had in his pocket?

(A) ₹ 122
 (B) ₹ 142
 (C) ₹ 132
 (D) ₹ 137

23. If there are 24 pencils in a box. How many pencils Renu can keep in 4 similar boxes if she wants equal number of pencils in each box?

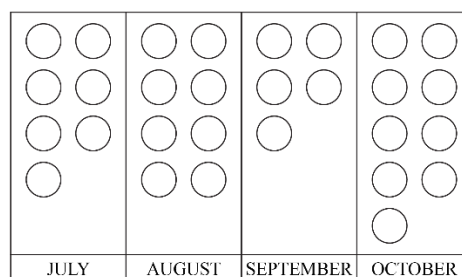
(A) 4
 (B) 6
 (C) 8
 (D) 3


24. There are 198 animals in a zoo, there are 29 tigers, 76 elephants, and some birds. How many birds are there in the zoo?

(A) 115
 (B) 105
 (C) 93
 (D) 85

25. Raj started playing at 4 pm and played for 40 mins. Then he worked on his homework for 25 mins. What is the time when he finished his homework?
- (A) 04:25 pm
 (B) 04:40 pm
 (C) 05:15 pm
 (D) 05:05 pm
26. Sonu and Monu together baked 281 cakes. If Sonu baked 159 cakes, how many does Monu bake?
- (A) 132
 (B) 112
 (C) 126
 (D) 122
27. There are 9 horses and 12 hens at a farm. What will be the total number of legs of both the animals together in the farm?
- (A) 42
 (B) 63
 (C) 60
 (D) 72
28. Identify the number:
- The digit at the hundreds place is thrice the digit at the ones place.
 - The tens digit is the difference between the hundreds and one's digit.
 - The place value of a hundred's place digit is 63 tens more than 270.
- (A) 642
 (B) 963
 (C) 321
 (D) 431

(Directions Q29-Q30) The given pictograph shows the number of dolls sold over a period of four months. Study the graph and answer the questions that follow.



Each  indicates 3 dolls.

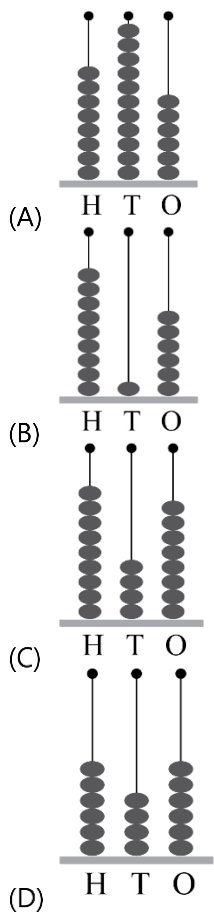
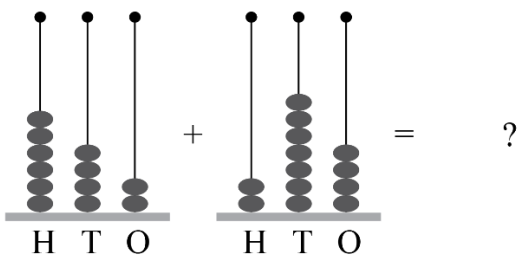
29. Find the total number of dolls sold by the shop over the four months.
- (A) 81
 (B) 84
 (C) 87
 (D) 90

THE MATH EXPERT

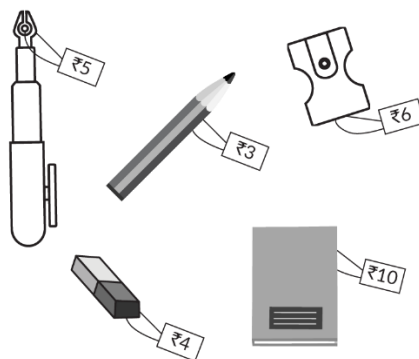
- (A) 12
(B) 10
(C) 9
(D) 15

ACHIEVERS SECTION

- Find the value of -



32. Rhea buys 4 pens, 5 pencils, 3 erasers, 2 sharpeners, and 7 notebooks from the market.



How much money she will have to pay?

- (A) ₹ 119
- (B) ₹ 109
- (C) ₹ 111
- (D) ₹ 129

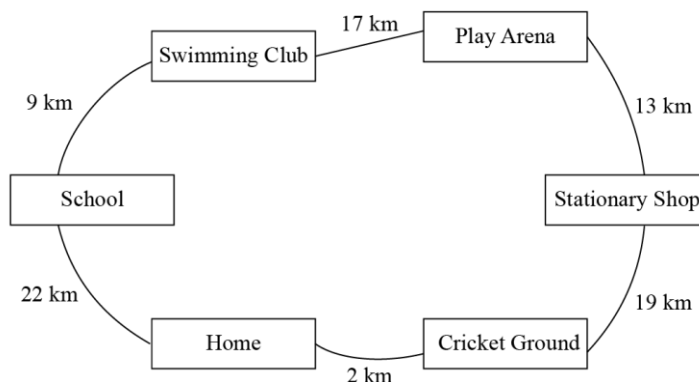
33. Each shape stands for a number.

$$\begin{array}{r}
 \star \\
 \bigcirc \\
 + \quad \square \quad \square \quad \square \\
 \hline
 9 \quad 7 \quad 4
 \end{array}$$

Find the value of \star , \bigcirc and \square respectively.

- (A) 4,3,2
- (B) 2,4,3
- (C) 2,3,4
- (D) 4, 2,3

34. Saurabh went to the Play Arena on Day 1 from his home. He went to the swimming club from the cricket ground on Day 2.



He followed the following routes:

Day 1: Home → School → Swimming Club → Play Arena

Day 2: Cricket Ground → Stationary shop → Play Arena → Swimming Club

Which route is the shortest and by how much distance?

- (A) Route taken on Day 1; 1 km
- (B) Route taken on Day 2; 1 km
- (C) Route taken on Day 1; 2 km
- (D) Route taken on Day 2; 2 km

35. The picture graph shows the type of chocolate that children like to eat.

Dairy Milk	Kinder Joy	Snickers	Dark Milk Chocolate
☆	☆	☆	☆
☆	☆	☆	☆
☆	☆	☆	
	☆	☆	
	☆	☆	

Each ☆ represents 6 children

How many children who eat Snickers & Kinder Joy?

- (A) 24
- (B) 54
- (C) 48
- (D) 36

ANSWERS

- | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (D) | 2. (D) | 3. (C) | 4. (A) | 5. (B) | 6. (B) | 7. (B) | 8. (B) | 9.(D) |
| 10.(B) | 11. (B) | 12. (C) | 13. (D) | 14. (D) | 15. (D) | 16. (C) | 17. (D) | 18. (C) |
| 19. (D) | 20. (A) | 21. (B) | 22. (C) | 23. (B) | 24. (C) | 25. (D) | 26. (D) | 27. (C) |
| 28. (B) | 29. (C) | 30. (A) | 31. (B) | 32. (D) | 33. (C) | 34. (A) | 35. (B) | |

SOLUTION

LOGICAL REASONING

1. Raj enrolled in swimming classes on 11th March 20XX.

He will practice for 11 days i.e., till 21st March 20XX

He will be on trip for 3 days i.e., till 24th March

He comes back and practices for 3 more days, i.e., until **27th March**.

2. Answer: Option D

3. Neha has more notebooks than Ruhi.

Neha > Ruhi

Alyssa > Rashmi

Ruhi > Alyssa

Combining the conditions, we get-

Neha > Ruhi > Alyssa > Rashmi

Neha has the most number of notebooks.

4. Tuesday

↓

Monday (Yesterday)


↓

Sunday (Day before Yesterday)

5. Answer: Option B

6. The word 'KNOWLEDGE' is written as KNWLDG without vowels. The fifth letter from the right end is 'N'

7. In each of the images, the time increases by 20 mins.


8. As  is called  , so now the batsman will use .

9. Only in Figure D, both are squares.


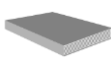
10. Answer: Option B

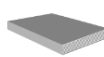
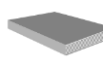
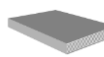
MATHEMATICAL REASONING

11. Answer: Option B

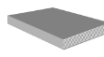
12. If  stands for 16, the value of each apple = 4
 Value of 8 apples = 32.

13. 17 tens and 6 ones = $170 + 6 = 176$

14. Here,  +  = 3 tens and 4 ones = $30 + 4 = 34$

 +  +  = 18

From the above two conditions we can conclude that,

 = 6

 = 28

15. $531 + 97 = 628$ and $717 - 89 = 628$

16. 3 hundred 7 ones = 307

5 hundred 4 tens 3 ones = 543

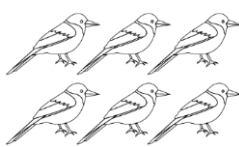
$307 + 543 = 850$

8 hundred **5** tens **0** ones

17. There is a total of 18 pineapples, which is represented by " 3×6 "

18. 27 footballs can be grouped into 9 groups of 3 footballs each.

19. If  = 12,

the value of  = $12 \times 6 = 72$

20. $71 + 233 = 304 = 3 \text{ hundred and } 4 \text{ ones.}$

EVERYDAY MATHEMATICS

21. No of chocolates in the box = 111

Rahul took out = 29 chocolates

No of chocolates left in the box = $111 - 29 = 82$.

22. The man had ₹329 in his purse.

He had ₹461 in his pocket.

The extra amount he has in his pocket than his purse = $₹ 461 - ₹ 329 = ₹ 132$

23. If there are 24 pencils in a box.

If Renu now has 4 similar boxes, then 24 pencils need to be kept in 4 boxes

4 boxes → 24 pencils

$$1 \text{ box} = \frac{24}{4} = 6 \text{ pencils}$$

∴ Renu can keep 6 pencils in 4 similar boxes.

24. There are 198 animals in the zoo

Total number of tigers and elephants = $29 + 76 = 105$.

The remaining number is the number of birds = $198 - 105 = 93$

25. Raj started playing at 4 pm and played for 40 mins, i.e., till 04:40 pm

Then he worked on his homework for 25 mins, i.e., till 05:05 pm

26. Sonu and Monu baked 281 cakes.

Sonu baked 159 cakes

Monu baked the remaining = $281 - 159 = 122$ cakes

27. There are 9 horses and 12 hens at the farm.

Each horse has 4 legs, so 9 horses will have $9 \times 4 = 36$ legs

Each hen has 2 legs, so 12 hens will have $2 \times 12 = 24$ legs

The total number of legs = $36 + 24 = 60$ legs

28. $63 \text{ tens more than } 270 = 630 + 270 = 900$
 The hundred's place digit 9 is thrice of the one's place digit '3'
 The difference between 9 & 3 is 6, which is the tens digit.
29. The total number of dolls sold by the shop over the four months $= 21 + 24 + 15 + 27 = 87$
30. The number of dolls sold in the month of September $= 15$
 The number of dolls sold in the month of October $= 27$
 The difference between the number of dolls sold $= 12$

ACHIEVERS SECTION

31. Answer: Option B
32. Value of 4 pens $= ₹ 20$
 Value of 5 pencils $= ₹ 15$
 Value of 3 erasers $= ₹ 12$
 Value of 2 sharpeners $= ₹ 12$
 Value of 7 notebooks $= ₹ 70$
 Total money paid by Rhea $= ₹ 129$
33. Answer: Option C
34. Distance covered on Day 1: Home \rightarrow School \rightarrow Swimming Club \rightarrow Play Arena $= 48 \text{ km}$
 Distance covered on Day 2: Cricket Ground \rightarrow Stationary shop \rightarrow Play Arena \rightarrow Swimming Club $= 49 \text{ km}$
 The route taken on Day 1 is the shortest by 1km.
35. The number of children who eat both Snickers & Kinder Joy $= 9 \times 6 = 54$

The International Math Olympiad pack worth Rs 7000 comprises

- 7 Mock Exams
- Strategy E- Book
- 3 practice books for School Math, Aptitude

Book a trial class to avail

Latest Information
about IMO Exam

[Know more →](#)

Free IMO Mock Tests
for Class 1 to 10

[Know more →](#)

NCERT Video Solutions
for Class 7 to 10

[Know more →](#)

Math Worksheets
for all Classes

[Know more →](#)

Important Math
Formulae Sheets

[Know more →](#)

Great Math
Tips and Tricks!

[Know more →](#)

Cuemath workbooks and activities were a lot of fun to do. The IMO pack has a lot of tips & tricks on how to ace all kinds of exams

- Rahul, IMO Rank 2



Thank you for downloading the IMO Sample Paper :)

Your kid can be the next school topper

- ✓ Topic wise practise & mock tests
- ✓ Build speed and accuracy
- ✓ Instant doubt clearing
- ✓ Certified Math Expert



9 out of 10 Cuemath students score **90+**
in math exams within 12 weeks.

At Cuemath, children learn math with

180+

pecially
designed worksheets

15+

math
visualisations

500+

puzzle cards
for logical reasoning


150+

tab exercises
for speed & accuracy

BOOK A FREE TRIAL

50,000+
students enrolled

5000+
teachers across India

 **cuemath**
THE MATH EXPERT