

Class 4 · Reasoning Olympiad

Total questions 35	Total marks 40	Time 60 minutes	Negative marking None
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Each question has four options, of which only one is correct. Mark your answer on the answer sheet. The Achievers Section carries higher marks per question. The answer key with full solutions is at the end of this paper.

This is original practice material written to the Level 1 pattern. It is not a past paper and is not affiliated with SOF or any official olympiad body.

Logical Reasoning

30 questions · 1 mark each · 30 marks

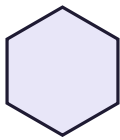
Q1. Find the odd one out: 24, 44, 72, 84, 108

- (A) 24 (B) 44 (C) 72 (D) 108

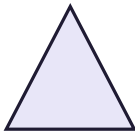
Q2. If today is Monday, what day is two days after today?

- (A) Friday (B) Thursday (C) Saturday (D) Wednesday

Q3. Which of these figures has exactly 2 lines of symmetry?



(A)



(B)



(C)



(D)

Q4. $4 : 16 :: 7 : \underline{\hspace{1cm}}$

- (A) 64 (B) 49 (C) 36 (D) 14

Q5. Which number comes just after 1573?

- (A) 1575 (B) 1576 (C) 1573 (D) 1574

Q6. Which of these numbers is the greatest?

- (A) 2713 (B) 319 (C) 3147 (D) 285

Q7. Pointing to a boy in a photograph, Anjali said, "He is the son of my paternal grandfather's only son." How is the boy related to Anjali?

- (A) Brother (B) Nephew (C) Uncle (D) Cousin

Q8. Cow : Calf :: Dog : ____

- (A) Foal (B) Puppy (C) Kitten (D) Cub

Q9. Which one does NOT belong with the others?

- (A) Bat (B) Parrot (C) Crow (D) Eagle

Q10. Which word would come FIRST in a dictionary?

- (A) maple (B) marble (C) matter (D) mango

Q11. Five friends A, B, C, D and E sit in a row of five seats. A sits at the extreme left end, D sits at the extreme right end, C sits exactly in the middle and B sits between A and C. Who sits in the fourth seat from the left?

- (A) B (B) D (C) C (D) E

Q12. Meera walks 9 m towards north, turns right and walks 8 m, then turns right again and walks 9 m. How far is Meera from the starting point, and in which direction?

- (A) 8 m, West (B) 17 m, North (C) 9 m, East (D) 8 m, East

Q13. If the 15th of a month is a Friday, what day of the week is the 26th of the same month?

- (A) Thursday (B) Monday (C) Wednesday (D) Tuesday

Q14. In the first row the numbers are 3, 5 and 13. In the second row they are 2, 3 and 10. In the third row they are 2, 2 and ____ . The same rule applies to every row.

- (A) 8 (B) 10 (C) 9 (D) 11

Q15. Find the next number in the pattern: 10, 15, 20, 25, ____

- (A) 35 (B) 25 (C) 31 (D) 30

Q16. If TIN is written as 20 - 9 - 14 using the positions of the letters in the alphabet, how is CAT written?

- (A) 4 - 2 - 21 (B) 24 - 26 - 7 (C) 3 - 1 - 20 (D) 20 - 1 - 3

Q17. Three of the following four are alike and form a group. Which one does NOT belong?

- (A) Banana (B) Guava (C) Apple (D) Potato

Q18. In a certain code BUS is written as DWU. How is SUN written in that code?

- (A) QSL (B) VXQ (C) UWP (D) PWU

Q19. Count forward in 3s: 18, 21, 24, 27, ____

- (A) 31 (B) 29 (C) 33 (D) 30

Q20. Which letter comes next? E, G, J, N, ____

- (A) T (B) Q (C) R (D) S

Q21. Count backward in 2s: 20, 18, 16, 14, ____

- (A) 12 (B) 14 (C) 13 (D) 10

Q22. Which letter comes next? C, G, K, O, ____

- (A) S (B) R (C) T (D) W

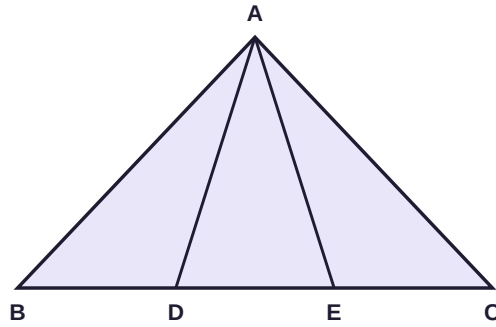
Q23. Find the next number in the pattern: 3, 9, 21, 45, ____

- (A) 93 (B) 90 (C) 91 (D) 96

Q24. In a row of 23 children, Ravi is 10th from the left end. What is Ravi's position from the right end?

- (A) 15th (B) 13th (C) 14th (D) 16th

Q25. How many triangles are there in the given figure?



- (A) 6 (B) 5 (C) 7 (D) 8

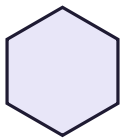
Q26. Find the odd one out: 9, 14, 18, 27, 30

- (A) 18 (B) 27 (C) 9 (D) 14

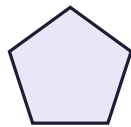
Q27. If today is Friday, what day is two days after today?

- (A) Wednesday (B) Tuesday (C) Sunday (D) Monday

Q28. Which of these figures has exactly 6 lines of symmetry?



(A)



(B)



(C)



(D)

Q29. $8 : 64 :: 6 : \underline{\hspace{1cm}}$

- (A) 12 (B) 49 (C) 36 (D) 25

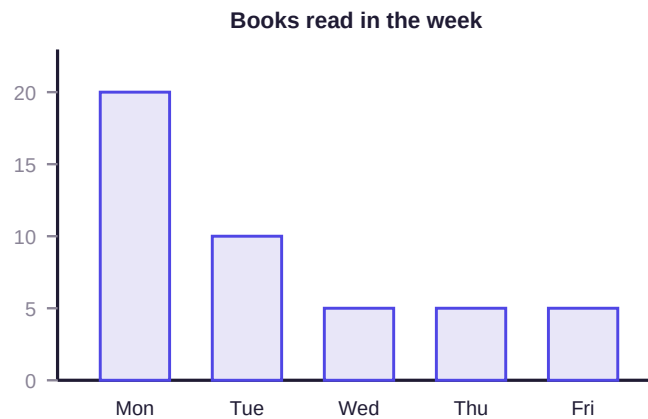
Q30. Which number comes just before 613?

- (A) 613 (B) 611 (C) 615 (D) 612

Achievers Section

5 questions · 2 marks each · 10 marks

Q31. The bar graph shows the number of books read by a class on each day of one week. How many books were read in the whole week?



- (A) 55 (B) 50 (C) 40 (D) 45

Q32. Using each of the digits 5, 4, 0, 9 exactly once, what is the smallest 4-digit number that can be formed?

- (A) 0459 (B) 4068 (C) 9540 (D) 4059

Q33. The average of 5 numbers is 34. 4 of them are 7, 39, 47, 14. What is the remaining number?

- (A) 63 (B) 65 (C) 61 (D) 34

Q34. Find the next number: 6, 8, 12, 18, 26, ____

- (A) 36 (B) 38 (C) 34 (D) 37

Q35. There are 5 boxes with 5 samosas in each box. If 12 samosas are eaten, how many are left?

- (A) 25 (B) 16 (C) 10 (D) 13

Answer Key

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

Solutions

Q1. (B) Every other number is a multiple of 12. 44 is not.

Q2. (D) Counting 2 day(s) on from Monday gives Wednesday.

Q3. (D) Counting lines of symmetry: regular hexagon has 6, equilateral triangle has 3, square has 4, rectangle has 2. The answer is figure (D).

Q4. (B) The second number is the first multiplied by itself: $4 \times 4 = 16$, so $7 \times 7 = 49$.

- Q5. (D) The number just after 1573 is 1574.
- Q6. (C) Comparing 285, 319, 2713, 3147, the greatest is 3147.
- Q7. (A) Anjali's paternal grandfather's only son is Anjali's own father, so that man's son is Anjali's own sibling. The answer is Brother.
- Q8. (B) The second word relates to the first in the same way Puppy relates to Dog.
- Q9. (A) Bat is a mammal, not a bird.
- Q10. (D) In alphabetical order the words run mango, maple, marble, matter, so mango comes first.
- Q11. (D) Seat 1 = A, seat 3 = C, seat 5 = D. B must be between A and C, so B takes seat 2, and the only friend left for seat 4 is E.
- Q12. (D) The two 9 m walks (north, then south) cancel out, leaving only the 8 m walked towards the east. So the answer is 8 m, East.
- Q13. (D) 11 days later is 1 week(s) and 4 day(s), so the day moves 4 place(s) on from Friday to Tuesday.
- Q14. (C) The rule is: add the two numbers, then add 5. Check: 3, 5 gives 13 and 2, 3 gives 10; so 2, 2 gives 9.
- Q15. (D) Each number is 5 more than the one before it, so the next is $25 + 5 = 30$.
- Q16. (C) C is letter 3 and A is letter 1 and T is letter 20, so $CAT = 3 - 1 - 20$.
- Q17. (D) Guava, Banana, Apple are all fruits; Potato is not.
- Q18. (C) Each letter moves 2 place(s) forward in the alphabet, so SUN becomes UWP.
- Q19. (D) Adding 3 to 27 gives 30.
- Q20. (D) The gaps grow by one each time (+2, +3, +4, +5), so after N the next letter is S.
- Q21. (A) Subtracting 2 from 14 gives 12.
- Q22. (A) Each letter moves 4 place(s) forward in the alphabet, so after O comes S.
- Q23. (A) Each number is doubled and 3 is added: $45 \times 2 + 3 = 93$.
- Q24. (C) Position from the right = total - position from the left + 1 = $23 - 10 + 1 = 14$ th.
- Q25. (A) Every triangle has apex A and two of the 4 base points as its other corners. Choosing 2 from 4 gives 6 triangles.
- Q26. (D) Every other number is a multiple of 3. 14 is not.
- Q27. (C) Counting 2 day(s) on from Friday gives Sunday.
- Q28. (A) Counting lines of symmetry: regular hexagon has 6, regular pentagon has 5, square has 4, rectangle has 2. The answer is figure (A).
- Q29. (C) The second number is the first multiplied by itself: $8 \times 8 = 64$, so $6 \times 6 = 36$.
- Q30. (D) The number just before 613 is 612.
- Q31. (D) $20 + 10 + 5 + 5 + 5 = 45$ books.
- Q32. (D) A 4-digit number cannot begin with 0, so the smallest possible first digit is 4. The remaining digits are then placed in increasing order: 4059.
- Q33. (A) The 5 numbers add up to $34 \times 5 = 170$. The given numbers add up to 107, so the missing number is $170 - 107 = 63$.
- Q34. (A) The gaps grow 2, 4, 6, 8, so the next gap is 10 and $26 + 10 = 36$.
- Q35. (D) $5 \times 5 = 25$ samosas in all, and $25 - 12 = 13$ are left.