

Class 3 · 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.

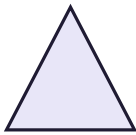
Logical Reasoning

30 questions · 1 mark each · 30 marks

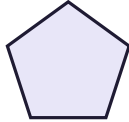
Q1. $7 : 49 :: 13 : \underline{\hspace{1cm}}$

- (A) 169 (B) 144 (C) 26 (D) 196

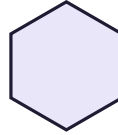
Q2. Which of these figures has exactly 2 lines of symmetry?



(A)



(B)



(C)



(D)

Q3. Which number comes just before 258?

- (A) 260 (B) 257 (C) 258 (D) 256

Q4. In the first row the numbers are 2, 2 and 4. In the second row they are 5, 2 and 10. In the third row they are 2, 4 and ____ . The same rule applies to every row.

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

Q5. Arjun walks 3 m towards north, turns right and walks 8 m, then turns right again and walks 3 m. How far is Arjun from the starting point, and in which direction?

- (A) 8 m, East (B) 8 m, West (C) 11 m, North (D) 3 m, East

Q6. In a row of 25 children, Imran is 4th from the left end. What is Imran's position from the right end?

- (A) 24th (B) 22th (C) 21th (D) 23th

Q7. If DOG is written as 4 - 15 - 7 using the positions of the letters in the alphabet, how is INK written?

- (A) 18 - 13 - 16 (B) 11 - 14 - 9 (C) 10 - 15 - 12 (D) 9 - 14 - 11

Q8. Which letter comes next? C, E, H, L, ____

- (A) Q (B) O (C) P (D) R

Q9. Find the odd one out: 47, 63, 72, 81, 99

- (A) 63 (B) 47 (C) 99 (D) 72

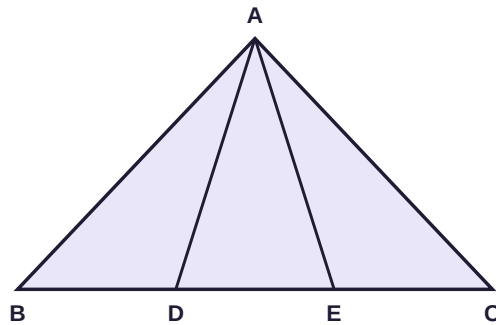
Q10. Find the next number in the pattern: 9, 15, 21, 27, ____

- (A) 34 (B) 27 (C) 39 (D) 33

Q11. Look at the pattern: star, circle, star, circle, star, ____ . Which shape comes next?

- (A) oval (B) circle (C) star (D) hexagon

Q12. How many triangles are there in the given figure?



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

Q13. If today is Saturday, what day is the day after today?

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

Q14. Count forward in 3s: 6, 9, 12, 15, ____

- (A) 19 (B) 18 (C) 17 (D) 21

Q15. Which of these numbers is the greatest?

- (A) 466 (B) 2009 (C) 1822 (D) 148

Q16. Count backward in 5s: 65, 60, 55, 50, ____

- (A) 45 (B) 50 (C) 40 (D) 46

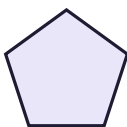
Q17. Which letter comes next? O, Q, S, U, ____

- (A) V (B) X (C) W (D) Y

Q18. $4 : 16 :: 5 : \underline{\hspace{1cm}}$

- (A) 10 (B) 16 (C) 25 (D) 36

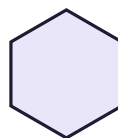
Q19. Which of these figures has exactly 5 lines of symmetry?



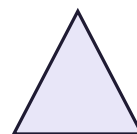
(A)



(B)



(C)



(D)

Q20. Which number comes just before 225?

- (A) 225 (B) 224 (C) 223 (D) 227

Q21. Meera walks 4 m towards north, turns right and walks 5 m, then turns right again and walks 4 m. How far is Meera from the starting point, and in which direction?

- (A) 5 m, West (B) 4 m, East (C) 5 m, East (D) 9 m, North

Q22. In a row of 17 children, Sana is 10th from the left end. What is Sana's position from the right end?

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

Q23. If TIN is written as 20 - 9 - 14 using the positions of the letters in the alphabet, how is BAG written?

- (A) 7 - 1 - 2 (B) 3 - 2 - 8 (C) 2 - 1 - 7 (D) 25 - 26 - 20

Q24. Which letter comes next? D, F, I, M, ____

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

Q25. Find the odd one out: 14, 28, 35, 50, 63

- (A) 14 (B) 28 (C) 35 (D) 50

Q26. Find the next number in the pattern: 8, 15, 22, 29, ____

- (A) 29 (B) 36 (C) 37 (D) 43

Q27. Look at the pattern: square, triangle, square, triangle, square, ____ . Which shape comes next?

- (A) hexagon (B) oval (C) triangle (D) square

Q28. Count forward in 10s: 40, 50, 60, 70, ____

- (A) 81 (B) 90 (C) 79 (D) 80

Q29. Which of these numbers is the smallest?

- (A) 1918 (B) 763 (C) 1947 (D) 1131

Q30. Count backward in 10s: 70, 60, 50, 40, ____

- (A) 20 (B) 40 (C) 31 (D) 30

Achievers Section

5 questions · 2 marks each · 10 marks

Q31. There are 5 boxes with 4 oranges in each box. If 15 oranges are eaten, how many are left?

- (A) 5 (B) 8 (C) 2 (D) 20

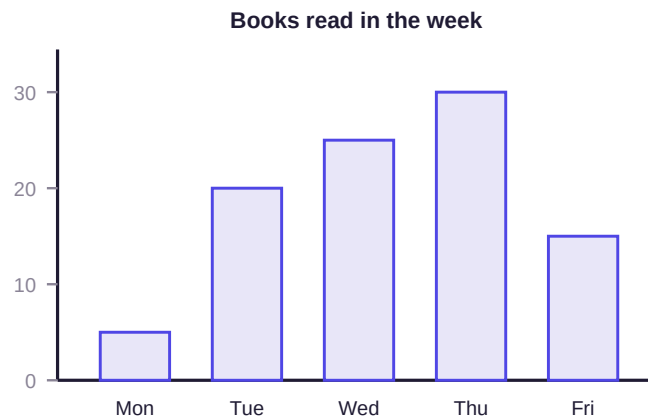
Q32. Choose the correct form: "The ____ playing in the park." (use the plural of 'baby')

- (A) babys are (B) babies are (C) babies is (D) baby are

Q33. Using each of the digits 0, 7, 8, 9 exactly once, what is the smallest 4-digit number that can be formed?

- (A) 7089 (B) 9870 (C) 7098 (D) 0789

Q34. 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) 90 (B) 95 (C) 100 (D) 105

Q35. $62 + \underline{\quad} = 135$

- (A) 83 (B) 73 (C) 63 (D) 135

Answer Key

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

Solutions

Q1. (A) The second number is the first multiplied by itself: $7 \times 7 = 49$, so $13 \times 13 = 169$.

Q2. (D) Counting lines of symmetry: equilateral triangle has 3, regular pentagon has 5, regular hexagon has 6, rectangle has 2. The answer is figure (D).

Q3. (B) The number just before 258 is 257.

Q4. (A) The rule is: multiply the two numbers. Check: 2, 2 gives 4 and 5, 2 gives 10; so 2, 4 gives 8.

Q5. (A) The two 3 m walks (north, then south) cancel out, leaving only the 8 m walked towards the east. So the answer is 8 m, East.

Q6. (B) Position from the right = total - position from the left + 1 = $25 - 4 + 1 = 22$ th.

Q7. (D) I is letter 9 and N is letter 14 and K is letter 11, so $INK = 9 - 14 - 11$.

Q8. (A) The gaps grow by one each time (+2, +3, +4, +5), so after L the next letter is Q.

Q9. (B) Every other number is a multiple of 9. 47 is not.

Q10. (D) Each number is 6 more than the one before it, so the next is $27 + 6 = 33$.

Q11. (B) The pattern repeats star then circle over and over, so after star comes circle.

- Q12. (A) Every triangle has apex A and two of the 4 base points as its other corners. Choosing 2 from 4 gives 6 triangles.
- Q13. (B) Counting 1 day(s) on from Saturday gives Sunday.
- Q14. (B) Adding 3 to 15 gives 18.
- Q15. (B) Comparing 148, 466, 1822, 2009, the greatest is 2009.
- Q16. (A) Subtracting 5 from 50 gives 45.
- Q17. (C) Each letter moves 2 place(s) forward in the alphabet, so after U comes W.
- Q18. (C) The second number is the first multiplied by itself: $4 \times 4 = 16$, so $5 \times 5 = 25$.
- Q19. (A) Counting lines of symmetry: regular pentagon has 5, rectangle has 2, regular hexagon has 6, equilateral triangle has 3. The answer is figure (A).
- Q20. (B) The number just before 225 is 224.
- Q21. (C) The two 4 m walks (north, then south) cancel out, leaving only the 5 m walked towards the east. So the answer is 5 m, East.
- Q22. (C) Position from the right = total - position from the left + 1 = $17 - 10 + 1 = 8$ th.
- Q23. (C) B is letter 2 and A is letter 1 and G is letter 7, so $BAG = 2 - 1 - 7$.
- Q24. (A) The gaps grow by one each time (+2, +3, +4, +5), so after M the next letter is R.
- Q25. (D) Every other number is a multiple of 7. 50 is not.
- Q26. (B) Each number is 7 more than the one before it, so the next is $29 + 7 = 36$.
- Q27. (C) The pattern repeats square then triangle over and over, so after square comes triangle.
- Q28. (D) Adding 10 to 70 gives 80.
- Q29. (B) Comparing 763, 1131, 1918, 1947, the smallest is 763.
- Q30. (D) Subtracting 10 from 40 gives 30.
- Q31. (A) $5 \times 4 = 20$ oranges in all, and $20 - 15 = 5$ are left.
- Q32. (B) The plural of 'baby' is 'babies', and a plural subject takes 'are', so the answer is "babies are".
- Q33. (A) A 4-digit number cannot begin with 0, so the smallest possible first digit is 7. The remaining digits are then placed in increasing order: 7089.
- Q34. (B) $5 + 20 + 25 + 30 + 15 = 95$ books.
- Q35. (B) The missing number is $135 - 62 = 73$.

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