

Class 3 | Mathematics Olympiad

Instructions: Each question has one correct answer. Choose the best option (A/B/C/D). Answer key is provided at the end. This paper is for practice only — not an official exam paper. Recommended time: **45 minutes**.

Q1. $23 \times 14 + 18 \times 9 = ?$

A. 476

B. 484

C. 488

D. 494

Q2. A factory packs 144 bottles per hour and runs for 6.5 hours. How many bottles in total?

A. 864

B. 900

C. 936

D. 968

Q3. $2/3 + 3/4 = ?$ (as a fraction)

A. $5/12$

B. $5/7$

C. $17/12$

D. $11/12$

Q4. $N \div 6$ gives quotient 7 and remainder 5. What is N?

A. 41

B. 43

C. 47

D. 53

Q5. If $3A + 2B = 31$ and $A + B = 12$, what is the value of A?

A. 5

B. 6

C. 7

D. 8

Q6. Find the next term: 1, 5, 13, 29, 61, __ (each term = $2 \times \text{previous} + 3$)

A. 101

B. 109

C. 121

D. 125

Q7. What is the LCM of 12, 15, and 20?

A. 30

B. 60

C. 120

D. 180

Q8. How many multiples of 7 are between 1 and 100 (inclusive)?

A. 12

B. 13

C. 14

D. 15

Q9. A square field has perimeter 76 m. What is its area?

A. 289 m²

B. 324 m²

C. 361 m²

D. 400 m²

Q10. A triangle has angles in ratio 2:3:4. What is the SMALLEST angle?

A. 30°

B. 40°

C. 45°

D. 60°

Q11. Ravi reads 35 pages Monday, 48 Tuesday, 29 Wednesday. He needs 200 total. How many more pages remain?

A. 84

B. 86

C. 88

D. 90

Q12. What is the HCF of 84 and 126?

A. 21

B. 28

C. 42

D. 63

Q13. What is the 15th term of the sequence 4, 7, 10, 13, ...?

A. 43

B. 46

C. 49

D. 52

Q14. Pipe A fills a tank in 8 h; pipe B drains it in 12 h. Both open together — how many hours to fill it?

A. 20

B. 24

C. 26

D. 28

Q15. What is $\frac{3}{8}$ of 480?

A. 160

B. 170

C. 180

D. 190

Q16. A dozen eggs costs ₹54. What is the cost of 5 eggs?

A. ₹20

B. ₹22

C. ₹22.50

D. ₹25

Q17. Simplify: $\frac{5}{6} - \frac{1}{4} + \frac{1}{3}$

A. $\frac{3}{4}$

B. $\frac{5}{6}$

C. $\frac{7}{12}$

D. $\frac{11}{12}$

Q18. Find the digit d (0–9) such that 73 d 6 is divisible by 9.

A. 1

B. 2

C. 3

D. 4

Q19. How many 2-digit numbers are divisible by both 4 and 6?

A. 4

B. 5

C. 7

D. 8

Q20. The mean of 5 numbers is 28. One number, 40, is removed. What is the new mean?

A. 24

B. 25

C. 26

D. 27

Q21. A rectangle's length is twice its width plus 5. If the perimeter is 58 cm, what is the area?

A. 126 cm^2

B. 150 cm^2

C. 168 cm^2

D. 180 cm^2

Q22. $(2^3 + 3^2) \times (4 - 1) = ?$

A. 48

B. 50

C. 51

D. 54

Q23. What is the smallest positive integer that must be added to 248 to make it a perfect square?

A. 6

B. 7

C. 8

D. 9

Q24. In 3 years, Anu's age will equal twice her current age minus 4. How old is Anu now?

A. 5

B. 7

C. 9

D. 11

Q25. How many factors does 72 have?

A. 8

B. 9

C. 10

D. 12

Q26. Red, blue, and green balls are in ratio 2:5:3. There are 20 blue balls. How many total balls?

A. 36

B. 40

C. 44

D. 48

Q27. A 2-digit number exceeds its reverse by 54, and the sum of its digits is 8. What is the number?

A. 53

B. 62

C. 71

D. 80

Q28. What is the sum of the first 10 odd numbers ($1 + 3 + 5 + \dots + 19$)?

A. 90

B. 95

C. 100

D. 110

Q29. A circular track has circumference 440 m. A runner completes 5 full laps. How far did he run?

A. 2000 m

B. 2100 m

C. 2200 m

D. 2300 m

Q30. What is the largest prime number less than 60?

A. 53

B. 57

C. 59

D. 61

Q31. Three taps fill a cistern in 6, 8, and 12 hours. How many hours to fill it with all three open?

A. 2.4 h

B. 2.67 h

C. 3 h

D. 3.2 h

Q32. What is 15% of 240?

A. 32

B. 34

C. 36

D. 38

Q33. A train 200 m long travels at 72 km/h. How many seconds does it take to cross a 400 m bridge?

A. 25 s

B. 28 s

C. 30 s

D. 35 s

Q34. $7^2 - 5^2 + 3^2 = ?$

A. 30

B. 31

C. 33

D. 36

Q35. A bag has 5 red and 3 blue marbles. In how many ways can 2 red marbles be chosen together?

A. 8

B. 10

C. 12

D. 15

Q36. If A:B = 3:4 and B:C = 5:6, what is A:C?

A. 5:8

B. 15:24

C. 5:6

D. 3:5

Q37. Which 3-digit number is BOTH a perfect square and a perfect cube?

A. 216

B. 343

C. 512

D. 729

Q38. In how many ways can the 5 letters of MATHS be arranged (all different)?

A. 60

B. 100

C. 120

D. 150

Q39. What is the remainder when 2^{10} is divided by 7?

A. 1

B. 2

C. 3

D. 4

Q40. A 3-digit number: digit sum = 16, hundreds digit = twice units digit, tens digit = 4. What is the number?

A. 484

B. 664

C. 844

D. 862

Answer Key

Q1: B Q2: C Q3: C Q4: C Q5: C Q6: D Q7: B Q8: C Q9: C Q10: B
Q11: C Q12: C Q13: B Q14: B Q15: C Q16: C Q17: D Q18: B Q19: D
Q20: B Q21: C Q22: C Q23: C Q24: B Q25: D Q26: B Q27: C Q28: C
Q29: C Q30: C Q31: B Q32: C Q33: C Q34: C Q35: B Q36: A Q37: D
Q38: C Q39: B Q40: C