

Full Practice Exam — Set 1

Mathematics · Class 5 · Full Syllabus Practice Exam

TIME 60 minutes	QUESTIONS 50	TOTAL MARKS 60	MAX. SCORE ___ / 60
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Name: _____ Class/Sec: _____ Date: _____

INSTRUCTIONS

- There are **50 questions** in this paper. All questions are compulsory.
- Each question has four options (A), (B), (C) and (D). Exactly **one** option is correct.
- Questions 1–45 carry **1 mark** each. Questions 46–50 (Achievers Section) carry **3 marks** each.
- There is no negative marking. Use of a calculator is **not** allowed.
- Fill in your answers on the answer sheet. Rough work may be done at the side of each page.

Section 1 — Logical Reasoning

Q1–Q10 · 1 mark each

- What comes next in the series? 3, 6, 12, 24, ____
 (A) 30 (B) 36
 (C) 42 (D) 48
- Find the **odd one out**: 8, 27, 36, 64
 (A) 8 (B) 27
 (C) 36 (D) 64
- What comes next in the series? AZ, CY, EX, ____
 (A) FV (B) FW
 (C) GV (D) GW
- In a certain code, PLANT is written as 16-12-1-14-20. How is GRAIN written in the same code?
 (A) 7-18-1-9-14 (B) 7-17-1-9-14
 (C) 7-18-1-8-14 (D) 8-18-1-9-14
- Pointing to a photograph, Rita said, 'He is the only son of my grandfather's only son.' How is the man in the photo related to Rita?
 (A) Father (B) Cousin
 (C) Uncle (D) Brother
- In a row of 20 students, Vikram is 8th from the left end. What is his position from the right end?
 (A) 13th (B) 12th
 (C) 11th (D) 14th
- A man walks 5 km north, then 12 km east. How far is he from his starting point?
 (A) 7 km (B) 60 km
 (C) 17 km (D) 13 km

8. Which of the figures P, Q, R or S is the correct **mirror image** of the given figure about the dashed line?

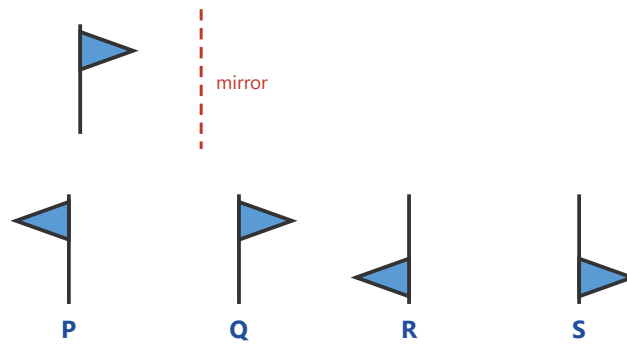


Fig. 8.1 — The flag and four possible mirror images

- (A) P (B) Q
(C) R (D) S
9. $8 : 64 :: 6 : \underline{\hspace{1cm}}$
(A) 36 (B) 42
(C) 48 (D) 56
10. If 1 January 2026 is a Thursday, what day of the week is 29 January 2026?
(A) Thursday (B) Wednesday
(C) Friday (D) Saturday

Section 2 — Mathematical Reasoning

Q11–Q28 · 1 mark each

11. What is the place value of 6 in 4,62,375?
(A) 6000 (B) 600
(C) 6,00,000 (D) 60,000
12. Which of these numbers is the **greatest**?
(A) 90,001 (B) 89,999
(C) 9,999 (D) 89,099
13. How many factors does 36 have?
(A) 6 (B) 8
(C) 9 (D) 12
14. The HCF of 24, 36 and 60 is _____.
(A) 4 (B) 6
(C) 12 (D) 18
15. $\frac{3}{4} + \frac{5}{6} = \underline{\hspace{1cm}}$
(A) $\frac{8}{10}$ (B) $\frac{19}{12}$
(C) $\frac{15}{24}$ (D) $\frac{8}{12}$
16. The decimal 0.375 written as a fraction in simplest form is _____.
(A) $\frac{3}{4}$ (B) $\frac{375}{100}$
(C) $\frac{37}{50}$ (D) $\frac{3}{8}$

17. 40% of 350 is _____.
(A) 120 (B) 140
(C) 150 (D) 175
18. If 6 pens cost ₹90, then 11 pens will cost _____.
(A) ₹165 (B) ₹150
(C) ₹180 (D) ₹198
19. An angle measuring 95° is a/an _____ angle.
(A) Acute (B) Obtuse
(C) Right (D) Straight
20. The sum of the three angles of any triangle is _____.
(A) 90° (B) 360°
(C) 270° (D) 180°
21. The perimeter of a rectangle 14 cm long and 9 cm wide is _____.
(A) 46 cm (B) 32 cm
(C) 23 cm (D) 126 cm
22. The area of a square of side 13 cm is _____.
(A) 26 cm^2 (B) 169 cm^2
(C) 52 cm^2 (D) 169 cm
23. How many lines of symmetry does a rectangle have?
(A) 1 (B) 4
(C) 2 (D) Infinitely many
24. Which of these is a prime number?
(A) 51 (B) 57
(C) 61 (D) 91
25. The average of 12, 18, 24 and 26 is _____.
(A) 18 (B) 20
(C) 22 (D) 80
26. 1 square metre is equal to _____ square centimetres.
(A) 100 (B) 1,000
(C) 1,00,000 (D) 10,000
27. The volume of a cube of side 6 cm is _____.
(A) 216 cm^3 (B) 72 cm^3
(C) 36 cm^3 (D) 18 cm^3
28. $\frac{2}{3} \times \frac{9}{10} =$ _____.
(A) $\frac{11}{13}$ (B) $\frac{3}{5}$
(C) $\frac{18}{13}$ (D) $\frac{20}{27}$

29. A book costs ₹145. Riya buys 4 such books and pays with a ₹1,000 note. How much change does she get?
- (A) ₹380 (B) ₹455
(C) ₹420 (D) ₹580
30. A film starts at 4:35 p.m. and ends at 6:50 p.m. How long is the film?
- (A) 2 hours 5 minutes (B) 3 hours 15 minutes
(C) 2 hours 25 minutes (D) 2 hours 15 minutes
31. A rope is 5 m 40 cm long. A piece 1 m 75 cm long is cut off. What length of rope is left?
- (A) 3 m 65 cm (B) 3 m 75 cm
(C) 4 m 35 cm (D) 4 m 65 cm
32. One bag of rice weighs 25 kg. What is the total weight of 8 such bags?
- (A) 175 kg (B) 200 kg
(C) 225 kg (D) 250 kg
33. A school has 24 classrooms with 35 desks in each. How many desks are there in all?
- (A) 740 (B) 820
(C) 840 (D) 860
34. 1,260 pencils are packed into boxes of 15 pencils each. How many boxes are needed?
- (A) 74 (B) 84
(C) 94 (D) 104
35. In a school of 96 students, $\frac{3}{8}$ are girls. How many **boys** are there?
- (A) 36 (B) 48
(C) 60 (D) 72
36. A square park has a side of 45 m. What is the cost of fencing it all round at ₹30 per metre?
- (A) ₹1,350 (B) ₹4,050
(C) ₹5,400 (D) ₹6,750
37. The bar graph shows the number of books read by four children in a year. How many **more** books did Bina read than Chetan?

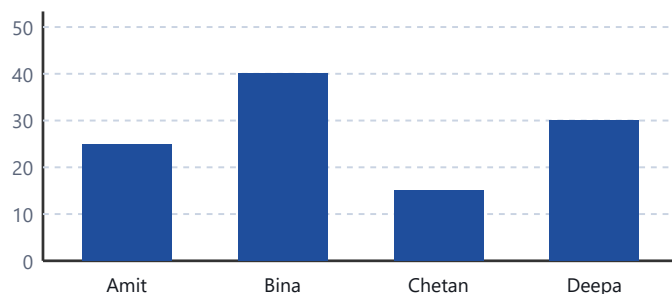


Fig. 37.1 — Books read in a year

- (A) 15 (B) 20
(C) 25 (D) 40

38. A shopkeeper had 5,000 pens. He sold 1,845 pens in the first week and 2,378 pens in the second week. How many pens are left?
- (A) 767 (B) 777
(C) 787 (D) 823
39. A cyclist covers 1.8 km in 6 minutes. What is her speed in metres per minute?
- (A) 200 m/min (B) 250 m/min
(C) 1,800 m/min (D) 300 m/min
40. The cost of 3.5 kg of sugar is ₹157.50. What is the cost of 1 kg?
- (A) ₹45 (B) ₹42
(C) ₹48 (D) ₹52.50
41. 8 workers can paint a wall in 15 days. How long would 12 workers of the same ability take?
- (A) 8 days (B) 10 days
(C) 12 days (D) 20 days
42. The angles of a triangle are in the ratio 2 : 3 : 4. The largest angle is _____.
- (A) 40° (B) 60°
(C) 80° (D) 90°
43. A ladder 13 m long leans against a wall with its foot 5 m from the wall. How high up the wall does it reach?
- (A) 8 m (B) 10 m
(C) 18 m (D) 12 m
44. Which sign makes this true? $\frac{2}{5} \square \frac{3}{5}$
- (A) < (B) >
(C) = (D) ×
45. A tank is $\frac{3}{8}$ full. It needs 250 litres more to become $\frac{5}{8}$ full. What is its total capacity?
- (A) 800 litres (B) 1,000 litres
(C) 1,250 litres (D) 2,000 litres

Achievers Section

Q46–Q50 · 3 marks each

46. Consider the following statements.
- (i) Every prime number greater than 2 is odd.
(ii) If a number is divisible by 4 and by 6, it must be divisible by 24.
(iii) The HCF of two co-prime numbers is 1.
- Which of the statements is/are correct?
- (A) (i) and (ii) only (B) (i) and (iii) only
(C) (ii) and (iii) only (D) All three
47. A shopkeeper bought 18 boxes of pens with 24 pens in each box, at ₹15 per pen. He sold all the pens for ₹8,000. How much profit did he make?
- (A) ₹520 (B) ₹1,520 loss
(C) ₹1,520 (D) ₹2,480

48. A square garden of side 20 m has a path 1 m wide running all around it on the **inside**. What is the area of the path?
- (A) 324 m^2 (B) 80 m^2
(C) 84 m^2 (D) 76 m^2
49. Sunil spent $\frac{1}{3}$ of his money on books and $\frac{2}{5}$ of the **remainder** on stationery. He was left with ₹360. How much money did he have at first?
- (A) ₹900 (B) ₹720
(C) ₹1,000 (D) ₹1,200
50. A rectangular hall is 18 m long and 12 m wide. A square carpet of side 10 m is spread inside it. What area of the floor is left **uncovered**?
- (A) 106 m^2 (B) 116 m^2
(C) 126 m^2 (D) 216 m^2

Answer Key

1	D	2	C	3	D	4	A	5	D
6	A	7	D	8	A	9	A	10	A
11	D	12	A	13	C	14	C	15	B
16	D	17	B	18	A	19	B	20	D
21	A	22	B	23	C	24	C	25	B
26	D	27	A	28	B	29	C	30	D
31	A	32	B	33	C	34	B	35	C
36	C	37	C	38	B	39	D	40	A
41	B	42	C	43	D	44	A	45	B
46	B	47	C	48	D	49	A	50	B

Solutions

1. Answer: (D) 48

Each number is **doubled** to get the next: 3, 6, 12, 24, and $24 \times 2 = 48$.

2. Answer: (C) 36

$8 = 2^3$, $27 = 3^3$ and $64 = 4^3$ — each is a number multiplied by itself three times. **36** is not, so it is the odd one out.

3. Answer: (D) GW

The first letter skips one and moves forward — A, C, E, **G** — while the second moves backward from the end one at a time — Z, Y, X, **W**. So the next pair is **GW**.

4. Answer: (A) 7-18-1-9-14

Each letter is replaced by its position in the alphabet.

G=7, R=18, A=1, I=9, N=14, giving **7-18-1-9-14**.

5. Answer: (D) Brother

Rita's grandfather's only son is Rita's father. The only son of Rita's father is Rita's **brother** (assuming Rita is his sister).

6. Answer: (A) 13th

Position from the right = total – position from the left + 1

= $20 - 8 + 1 = 13\text{th}$.

7. Answer: (D) 13 km

His two paths meet at a right angle, forming a right-angled triangle.

Distance = $\sqrt{5^2 + 12^2} = \sqrt{25 + 144} = \sqrt{169} = 13 \text{ km}$.

8. Answer: (A) P

A mirror swaps left and right but never turns a figure upside down. The flag points right near the top of the pole, so its mirror image points **left, still near the top** — figure **P**.

9. Answer: (A) 36

The second number is the first multiplied by itself: $8 \times 8 = 64$.

So $6 \times 6 = 36$.

10. Answer: (A) Thursday

29 January is 28 days after 1 January, and $28 = 4 \times 7$, exactly 4 weeks. So the day of the week repeats: **Thursday**.

11. Answer: (D) 60,000

The digit 6 sits in the **ten thousands** place, so its place value is $6 \times 10,000 = 60,000$.

12. Answer: (A) 90,001

89,999, 90,001 and 89,099 have five digits, 9,999 has four. Among the five-digit numbers, 90,001 has 9 in the ten-thousands place, more than the 8 in the others, so **90,001** is the greatest.

13. Answer: (C) 9

The factors are 1, 2, 3, 4, 6, 9, 12, 18 and 36 — that is **9** factors.

14. Answer: (C) 12

$24 = 2^3 \times 3$, $36 = 2^2 \times 3^2$, $60 = 2^2 \times 3 \times 5$.

Common factors: $2^2 \times 3 = 12$.

15. Answer: (B) $\frac{19}{12}$

The LCM of 4 and 6 is 12.

$\frac{3}{4} = \frac{9}{12}$ and $\frac{5}{6} = \frac{10}{12}$.

Sum = $\frac{9}{12} + \frac{10}{12} = \frac{19}{12}$.

16. Answer: (D) $\frac{3}{8}$

$0.375 = \frac{375}{1000}$. Dividing top and bottom by 125 gives $\frac{3}{8}$.

17. Answer: (B) 140

40% of 350 = $(40 \div 100) \times 350 = 140$.

18. Answer: (A) ₹165

Cost of 1 pen = $90 \div 6 = ₹15$.

Cost of 11 pens = $11 \times 15 = ₹165$.

19. Answer: (B) Obtuse

An **obtuse** angle is more than 90° but less than 180° .

20. Answer: (D) 180°

The three angles of any triangle always add up to **180°** .

21. Answer: (A) 46 cm

Perimeter = $2 \times (14 + 9) = 2 \times 23 = 46$ cm.

22. Answer: (B) 169 cm^2

Area = side $\times$ side = $13 \times 13 = 169 \text{ cm}^2$.

23. Answer: (C) 2

A rectangle can be folded vertically and horizontally, giving **2** lines of symmetry.

24. Answer: (C) 61

$51=3 \times 17$, $57=3 \times 19$, $91=7 \times 13$ are composite. **61** has no factor other than 1 and itself, so it is prime.

25. Answer: (B) 20

Average = $(12+18+24+26) \div 4 = 80 \div 4 = 20$.

26. Answer: (D) 10,000

1 m = 100 cm, so $1 \text{ m}^2 = 100 \times 100 = 10,000 \text{ cm}^2$.

27. Answer: (A) 216 cm^3

Volume = $6 \times 6 \times 6 = 216 \text{ cm}^3$.

28. Answer: (B) $\frac{3}{5}$

$\frac{2}{3} \times \frac{9}{10} = \frac{18}{30}$. Dividing by 6 gives $\frac{3}{5}$.

29. Answer: (C) ₹420

Cost of 4 books = $4 \times 145 = ₹580$.

Change = $1,000 - 580 = ₹420$.

30. Answer: (D) 2 hours 15 minutes

From 4:35 p.m. to 6:35 p.m. is 2 hours, plus a further 15 minutes to 6:50 p.m. Total = **2 hours 15 minutes**.

31. Answer: (A) 3 m 65 cm

$540 \text{ cm} - 175 \text{ cm} = 365 \text{ cm} = 3 \text{ m } 65 \text{ cm}$.

32. Answer: (B) 200 kg

$8 \times 25 = 200$ kg.

33. Answer: (C) 840

$24 \times 35 = 24 \times 30 + 24 \times 5 = 720 + 120 = 840$ desks.

34. Answer: (B) 84

$1,260 \div 15 = 84$ boxes.

35. Answer: (C) 60

Girls = $\frac{3}{8}$ of 96 = 36. Boys = 96 – 36 = **60**.

36. Answer: (C) ₹5,400

Perimeter = $4 \times 45 = 180$ m.

Cost = $180 \times 30 = \text{₹}5,400$.

37. Answer: (C) 25

Bina 40, Chetan 15. Difference = $40 - 15 = 25$ books.

38. Answer: (B) 777

Sold = $1,845 + 2,378 = 4,223$. Left = $5,000 - 4,223 = 777$.

39. Answer: (D) 300 m/min

1.8 km = 1,800 m. Speed = $1,800 \div 6 = 300$ m/min.

40. Answer: (A) ₹45

$157.50 \div 3.5 = \text{₹}45$.

41. Answer: (B) 10 days

$8 \times 15 = 12 \times d$, so $d = 10$ days.

42. Answer: (C) 80°

Let angles be $2x, 3x, 4x$. $9x = 180^\circ$, $x = 20^\circ$. Largest = $4x = 80^\circ$.

43. Answer: (D) 12 m

$\text{height}^2 = 13^2 - 5^2 = 169 - 25 = 144$. height = $\sqrt{144} = 12$ m.

44. Answer: (A) <

Same denominator: compare numerators 2 and 3. $2 < 3$, so the sign is <.

45. Answer: (B) 1,000 litres

The 250 litres fill the gap of $\frac{1}{4}$, so capacity = $250 \times 4 = 1,000$ litres.

46. Answer: (B) (i) and (iii) only

Statement (i) is true. Statement (ii) is false — 4 and 6 share the factor 2, so the correct conclusion is divisibility by their LCM, 12; 12 itself is the counter-example. Statement (iii) is true. Hence **(i) and (iii)**.

47. Answer: (C) ₹1,520

Total pens = $18 \times 24 = 432$. Cost = $432 \times 15 = \text{₹}6,480$.

Profit = $8,000 - 6,480 = \text{₹}1,520$.

48. Answer: (D) 76 m^2

Whole garden = 400 m^2 . Inner square side = 18 m, area = 324 m^2 .

Path = $400 - 324 = 76 \text{ m}^2$.

49. Answer: (A) ₹900

After books, remainder = $\frac{2}{3}$. Spending $\frac{2}{5}$ of that leaves $\frac{3}{5}$ of $\frac{2}{3} = \frac{2}{5}$ of the original.

$\frac{2}{5}$ of total = 360, so total = **₹900**.

50. Answer: (B) 116 m^2

Hall area = $18 \times 12 = 216 \text{ m}^2$. Carpet area = 100 m^2 .

Uncovered = $216 - 100 = 116 \text{ m}^2$.