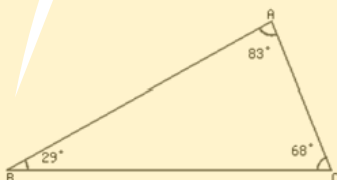


LOGICAL REASONING

1. Look at the given figure and state whether it is :



- a) Obtuse triangle
b) Right triangle
c) Acute triangle
d) None of these

2. Which of the following is the next term in the series.

V, S, R, O, N, J, K, _____

- a) E
b) F
c) I
d) G

3. The Rule of given Pattern is:

98 94 90 86 82 78 74 70

- a) Subtract 4
b) Divide by 4
c) Multiply by 4
d) Add 4

4. Complete the pattern



5. Which of the following letter sequences is in the correct alphabetical skip pattern?

- a) A, D, G, J, M
b) B, E, H, J, M
c) A, C, F, H, K
d) A, E, I, M, Q

MATHEMETICS

6. What comes just before 10,00,000?

- a) 99,999 b) 99,9999
- c) 9,99,999 d) 1,00,001

7. Match the number name to its numeral:

Number Name	Numeral
-------------	---------

Fifty-four thousand	a. 54,000
---------------------	-----------

Nine lakh twenty thousand	b. 9,20,000
---------------------------	-------------

Seven crore three lakh	c. 7,03,00,000
------------------------	----------------

Eighty lakh five thousand	d. 80,05,000
---------------------------	--------------

- a) 1-a, 2-b, 3-c, 4-d
- b) 1-b, 2-a, 3-d, 4-c
- c) 1-a, 2-c, 3-b, 4-d
- d) 1-d, 2-c, 3-a, 4-b

8. Which of these numbers is the smallest?

- a) 1,02,340 b) 1,00,320
- c) 99,999 d) 1,02,039

9. Which digit is at the ten thousand place in 3,27,891?

- a) 2 b) 3 c) 7 d) 8

True/False with reasoning:

10. Statement A: All 7-digit numbers are greater than all 6-digit numbers.
Statement B: The smallest 5-digit number is 10,000.

- a) Both true
- b) Only A is true
- c) Only B is true
- d) Both false

11. Arrange in descending order:

54,000; 45,000; 40,500; 50,050

- a) $54,000 > 50,050 > 45,000 > 40,500$
- b) $54,000 > 45,000 > 50,050 > 40,500$
- c) $40,500 > 45,000 > 50,050 > 54,000$
- d) $45,000 > 40,500 > 54,000 > 50,050$

12. What is the difference between 9,00,000 and 7,45,376?

- a) 1,54,624 b) 1,45,624
- c) 2,45,624 d) 1,54,474

13. Match the operation with its result:

Operation	Result
$6,54,321 + 2,45,679$	a. 9,00,000
$9,87,000 - 87,000$	b. 9,00,000
$3,000 \times 20$	c. 60,000
$4,00,000 \div 100$	d. 4,000

- a) 1-a, 2-b, 3-c, 4-d
- b) 1-b, 2-a, 3-d, 4-c
- c) 1-b, 2-a, 3-c, 4-d
- d) 1-d, 2-c, 3-b, 4-a

14. Word Problem:

A company produced 7,89,325 items in January and 8,12,678 items in February. How many items were produced in total?

- a) 16,12,003 b) 16,01,003
- c) 15,12,003 d) 15,01,003

15. Riddle:

I can add, subtract, divide, and more,
When numbers are big, I handle the chore.
What am I?

- a) Calculator b) Number
- c) Operation d) Digit

- a) 1 b) 2 c) 3 d) 4

16. How many of the following operations result in an even number?

- 1. $3,52,104 + 1,22,000$
- 2. $99,999 - 9,999$
- 3. $2,25,750 \times 2$
- 4. $5,00,000 \div 5$

- a) 1 b) 2 c) 3 d) 4

17. Which of the following operations is incorrectly solved?

- a) $7,50,000 + 4,25,000 = 3,25,000$
- b) $1,25,000 + 3,75,000 = 5,00,000$
- c) $2,000 \times 40 = 80,000$
- d) $6,000 \div 10 = 600$

18. Write in Hindu-Arabic notation?

XLIV, LV, LXVI, LXXVII, LXXXVIII, XCIX

a) 44, 55, 66, 77, 88, 99

b) 44, 55, 66, 77, 99, 88

c) 44, 55, 66, 88, 99, 77

d) 44, 66, 55, 77, 88, 99

19. True/False with reasoning:

Statement A: The sum of two odd numbers is always even.

Statement B: The difference between two even numbers is always even.

a) Both true

b) Only A is true

c) Only B is true

d) Both false

20. Convert this Roman numeral to a natural number: LXXXIX

a) 89

b) 99

c) 79

d) 69

21. Which of the following Roman numerals is incorrect or meaningless?

a) IX

b) IC

c) XL

d) XX

22. Match Roman numerals to their values:

Roman	Value
-------	-------

XL	a. 40
----	-------

XC	b. 90
----	-------

L	c. 50
---	-------

XXX	d. 30
-----	-------

a) XL-a, XC-b, L-c, XXX-d

b) XL-b, XC-c, L-d, XXX-a

c) XL-d, XC-a, L-b, XXX-c

d) XL-c, XC-d, L-a, XXX-b

23. Which of these statements is true?

a) XL is greater than LX

b) LXX = 80

c) XC < XL

d) XXX < L

24. Write the correct Roman numeral for:

$29 + 14 = ?$

a) XLIV

b) XXXIX

c) XLIII

d) XLII

25. Fill in the blank:

$X + XX = \underline{\hspace{2cm}}$

a) XXX

b) XXXX

c) XL

d) XX

26. How many of the following numbers are multiples of 5?

- 15, 25, 42, 75

a) 1

b) 2

c) 3

d) 4

27. Match the number to its type:

Number	Type
17	a. Prime
16	b. Composite
1	c. Neither
23	d. Prime

a) 17–a, 16–b, 1–c, 23–d

b) 17–b, 16–a, 1–d, 23–c

c) 17–d, 16–c, 1–a, 23–b

d) 17–a, 16–c, 1–b, 23–d

28. Which number is a common multiple of 3 and 4?

- a) 6 b) 8 c) 9 d) 12

29. Choose the incorrect statement:

- a) Every number is a factor of itself
b) 1 is a factor of every number
c) All even numbers are multiples of 2
d) 0 is a factor of all numbers

30. What fraction of the figure is shaded?



- a) $\frac{3}{5}$ b) $\frac{5}{8}$ c) $\frac{3}{8}$ d) $\frac{8}{3}$

31. Match the fraction to its type:

Fraction	Type
$\frac{1}{3}$	a. Proper
$\frac{7}{4}$	b. Mixed
$\frac{4}{4}$	c. Improper
$2\frac{1}{2}$	d. Unit

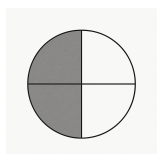
a) $\frac{1}{3}$ –d, $\frac{7}{4}$ –c, $\frac{4}{4}$ –a, $2\frac{1}{2}$ –b

b) $\frac{1}{3}$ –a, $\frac{7}{4}$ –c, $\frac{4}{4}$ –d, $2\frac{1}{2}$ –b

c) $\frac{1}{3}$ –b, $\frac{7}{4}$ –d, $\frac{4}{4}$ –a, $2\frac{1}{2}$ –c

d) $\frac{1}{3}$ –a, $\frac{7}{4}$ –d, $\frac{4}{4}$ –b, $2\frac{1}{2}$ –c

32. Now choose the simplest form of the shaded portion.



- a) $\frac{4}{8}$ b) $\frac{2}{4}$ c) $\frac{1}{2}$ d) $\frac{3}{4}$

33. Which of the following is equivalent to $\frac{3}{5}$?

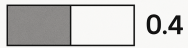
- a) $\frac{6}{10}$ b) $\frac{4}{7}$ c) $\frac{2}{3}$ d) $\frac{5}{8}$

34. How many of the following are like fractions?

1. $\frac{2}{7}$, $\frac{3}{7}$
2. $\frac{5}{9}$, $\frac{1}{8}$
3. $\frac{4}{12}$, $\frac{6}{12}$

- a) 1 b) 2 c) 3 d) 4

35. Which is correct?



- a) $0.4 > 0.6$ b) $0.6 = 0.4$
c) $0.6 < 0.4$ d) $0.6 > 0.4$

36. Identify the option that is correct.



- a) 3 equal sides
b) 4 equal angles and 4 equal sides
c) 2 equal sides
d) No equal angle

37. Match the shapes with their properties:

Shape	Property
Circle	a. Has 3 sides
Triangle	b. Has 1 curved line
Square	c. All sides equal
Rectangle	d. Opposite sides equal

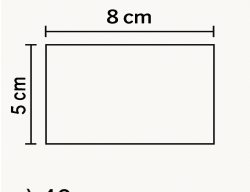
- a) Circle–b, Triangle–a, Square–c, Rectangle–d
b) Circle–c, Triangle–b, Square–a, Rectangle–d
c) Circle–d, Triangle–c, Square–b, Rectangle–a
d) Circle–a, Triangle–b, Square–d, Rectangle–c

38. How many angles are formed?



- a) 1 b) 12 c) 3 d) 4

39. Find the area of the rectangle.



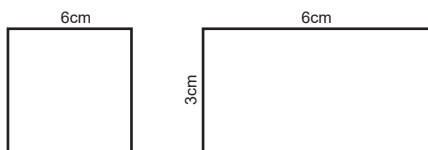
- a) 40 sq. cm b) 13 sq. cm
c) 26 sq. cm d) 30 sq. cm

40. Match the shape with its area formula:

Shape	Area Formula
Square	a. $l \times b$
Rectangle	b. $s \times s$
Triangle	c. $\frac{1}{2} \times b \times h$
Circle	d. $\pi \times r^2$

- a) Square–b, Rectangle–a, Triangle–c, Circle–d
b) Square–c, Rectangle–b, Triangle–a, Circle–d
c) Square–a, Rectangle–c, Triangle–d, Circle–b
d) Square–d, Rectangle–a, Triangle–b, Circle–c

41. Which shape has the greater area



- a) Square b) Rectangle
c) Both equal d) Cannot be determined

42. What is 25% of 200?

- a) 25 b) 50 c) 75 d) 100

43. What is 10% of 1,000?

- a) 1 b) 10 c) 100 d) 1,000

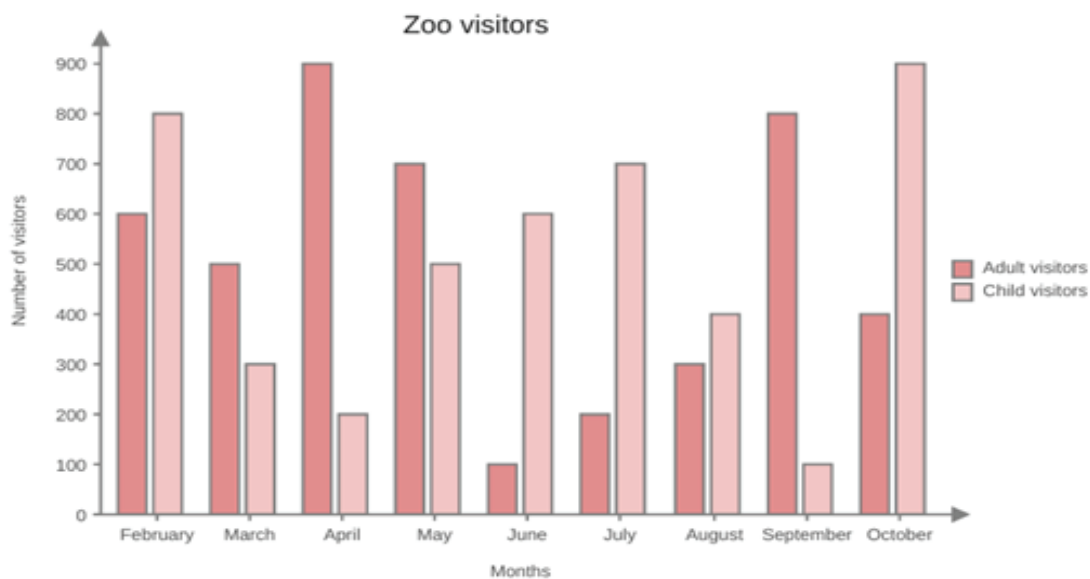
44. True/False with reasoning:

Statement A: Percent means “per hundred.”

Statement B: $40\% = 0.4$

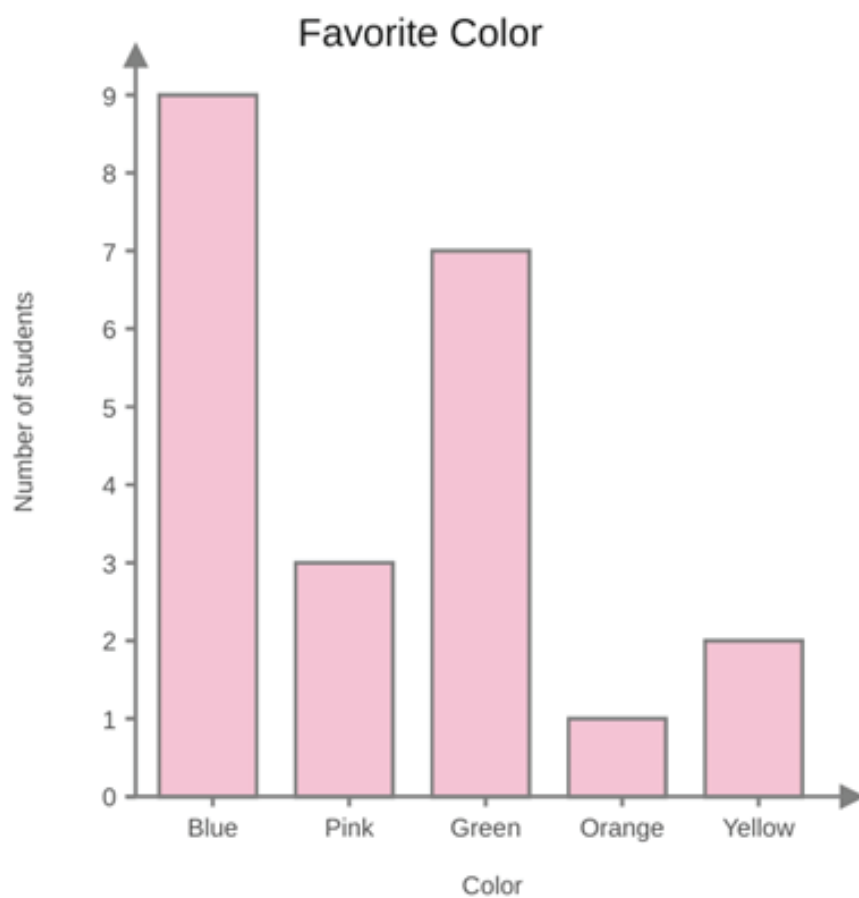
- a) Both true b) Only A is true
c) Only B is true d) Both false

45. In which month do most of the adult visitors visits zoo?



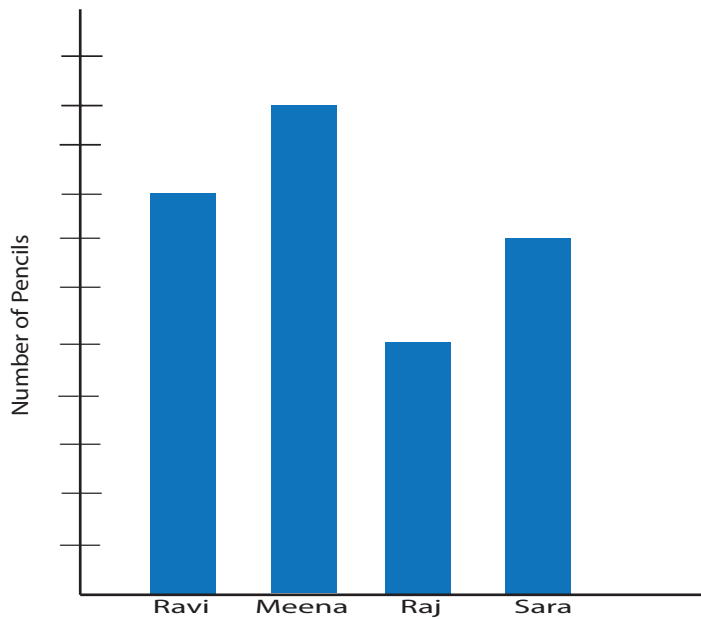
- a) July b) August
c) April d) October

46. The bar graph below shows the favourite color of the students in Mr Jose's class.



- a) 9 b) 12
c) 18 d) 16

47. How many more pencils does Meena have than Raj?



- a) 3 b) 5 c) 4 d) 6

48. Match the chart type to what it is used for:

Chart Type	Use
Bar Graph	a. To compare quantities
Pictograph	b. To represent data using images
Line Graph	c. To show change over time
Table	d. To organize numbers neatly

- a) Bar–a, Pictograph –b, Line–c, Table–d
b) Bar–b, Pictograph –a, Line–d, Table–c
c) Bar–d, Pictograph –c, Line–a, Table–b
d) Bar–c, Pictograph –d, Line–b, Table–a

49. In a class of 30 students:

- 12 like Football
- 10 like Cricket
- 8 like Basketball

What percentage of students like Football?

- a) 30% b) 40% c) 50% d) 60%

50. How many of the following statements are correct?

1. 10 lakh = 1 million
2. 1 crore = 10 million
3. 1,00,000 = 1 lakh
4. 10 crore = 100 lakh

a) 1 b) 2 c) 3 d) 4

Answer Key

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