

1. Write the greatest 4-digit number using different digits with 6 in the ten's place?

- A. 9865
- B. 9867
- C. 9687
- D. 6987

2. Commas are inserted in a number after each

- A. Place
- B. Digit
- C. Period
- D. None of these

3. Number name for 900800700 is

- A. Ninety crore eight lakhs and seven hundred
- B. Nine crore eight lakhs and seven hundred
- C. Ninety crore eighty lakhs and seven hundred
- D. Ninety crore eight lakhs and seven

4. The number with which 82 is multiplied so that product remains the same is

- A. 82
- B. 0
- C.  $\frac{1}{82}$
- D. 1

5. If negative sign precedes a bracket the sign of the terms inside the bracket will .....when the bracket is removed.

- A. Not change
- B. Change
- C. Remain the same
- D. Change or remain same

6. A man walked 3 km towards North then 8 km towards South. His position at the end of the walk is

- A. 5 km towards East
- B. 3 km towards South
- C. 8 km towards North
- D. 5 km towards South

7. A number is always divisible by 90 if

- A. It is divisible by both 2 and 45
- B. It is divisible by both 5 and 18
- C. It is divisible by both 9 and 10
- D. All the above

8. LCM of two coprime numbers is their

- A. Sum
- B. Difference
- C. Product
- D. Quotient

9. The total boundary length of circle is called

- A. Area
- B. Volume
- C. Circumference
- D. Diameter

10. Two points in a plane determine

- A. An infinite number of segment
- B. Exactly one segment
- C. Two segments
- D. None of these





11. Which of the following statement is false?

- A. Using protractor, angle of any measure between  $0^\circ$  and  $180^\circ$  can be drawn
- B. A line has two end points
- C. An angle whose measure is greater than  $90^\circ$  is an obtuse angle
- D. Two coinciding rays with a common end point form an angle of measure  $0^\circ$

12. A pair of angles with a common vertex and common arm are called

- A. Adjacent angles
- B. Complementary
- C. Supplementary
- D. None of these

13. Which of the following figure has six faces?

- A. 
- B. 
- C. 
- D. 

14. Tusal has a bag that contains 3 red, 1 blue, 6 green and 2 yellow marbles. What fractional part of the bag of marbles is red?





- (R) (R) (R)
- (B)
- (G) (G) (G) (G) (G) (G)
- (Y) (Y)

- A.  $\frac{1}{12}$   
 B.  $\frac{2}{12}$   
 C.  $\frac{3}{12}$   
 D.  $\frac{6}{12}$

15. My elder sister divided a watermelon into 18 parts. I ate 7 out of them. My friend ate 4. What fraction of watermelon remained?

- A.  $\frac{7}{18}$   
 B.  $\frac{11}{18}$   
 C.  $\frac{3}{18}$   
 D.  $\frac{4}{18}$

16. In which of the following does the shaded part represent one third of its whole?

- A.   
 B.   
 C.   
 D. 

17. Find the true expression.

- A.  $63\% < 0.6$   
 B.  $0.66 = \frac{5}{9}$   
 C.  $455 > \frac{11}{25}$   
 D.  $\frac{1}{6} > 0.17$

18. Expression of 0.23 in terms of vulgar fraction is

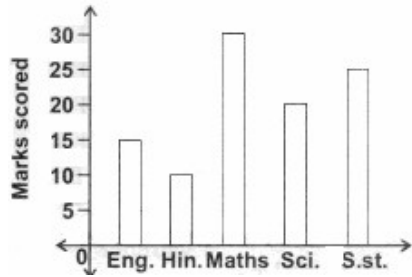
- A.  $\frac{7}{30}$   
 B.  $\frac{23}{100}$   
 C.  $\frac{23}{100}$

- C.  $\frac{90}{7}$   
 D. 90

19. Compare 12.1280  $\square$  12.129 (using  $>$ ,  $<$ ,  $=$ ,  $\geq$ )

- A.  $>$   
 B.  $<$   
 C.  $=$   
 D.  $\geq$

20. The given graph shows the marks scored by a student in his class test. Read the shown graph and answer the question.

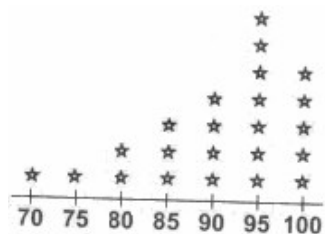


If the minimum marks for passing in subject is 14, then in how many subject/subjects he is failed ?

- A. 1  
 B. 2  
 C. 0  
 D. None of these

21. The line plot below shows how students scored on last week's maths test.

Maths Test Scores





KEY : \* = 1 student


How many students scored 95 or higher in the test?

- A. 5 students  
 B. 7 students  
 C. 12 students  
 D. 16 students

22. The following pictograph shows the number of scooters sold by a company during a week.

Day	Number of scooters sold
Monday	
Tuesday	
Wednesday	
Thursday	

Friday	
Saturday	

Scale used is:  = 6 scooters sold.

Study the pictograph carefully and answer the questions given below.

How many scooters were sold on Monday?

- A. 30
- B. 35
- C. 40
- D. 45

23. The perimeter of a rectangle is twice the ..... of length and breadth of the rectangle.

- A. Difference
- B. Sum
- C. Product
- D. Division

24. If the length and breadth of a rectangle are doubled, then its perimeter is

- A. Tripled
- B. Doubled
- C. Halved
- D. Four times

25. Find the area and perimeter of a rectangular plot of land whose length and breadth are 15.4 m and 6.5 m respectively.

- A. 100.10 sq. m, 43.8 m
- B. 43.8 m, 100.10 sq. m
- C. 4.38 m, 100.10 sq. m
- D. 1001.10 sq. m, 4.38 m

26. Simplify:  $2a - [3b - \{a - (2c - 3b) + 4c - 3(a - b - 2c)\}]$ .

- A.  $8c - 3b$
- B.  $8c + 3b$
- C.  $-8c - 3b$
- D.  $-8c + 3b$

27. When Raju multiplies a certain number by 17 and adds 4 to the product, he gets 225. Find that number.

- A. 13
- B. 14
- C. 15
- D. 16

28. If six times a number is 48, then the number is

- A. - 8
- B. 1
- C. 48
- D. 8

29. A bus travels 126 km in 3 hours and a train travels 315 km in 5 hours. The ratio of their speeds is

- A.  $\frac{126}{315}$
- B.  $\frac{2}{3}$
- C.  $\frac{1}{3}$
- D.  $\frac{3}{5}$

30. In a  $\Delta ABC$ , if  $\angle A = 4 \angle B = 6 \angle C$ , then  $\angle A$ ,  $\angle B$  and  $\angle C$  are

- A.  $70^\circ, 70^\circ, 40^\circ$
- B.  $80^\circ, 60^\circ, 40^\circ$
- C.  $60^\circ, 60^\circ, 60^\circ$
- D.  $75^\circ, 45^\circ, 60^\circ$

31. The prices of a scooter and a television set are in the ratio 3 : 2. If a scooter costs 6000 more than the television set, the price of the television set is

- A. Rs.6000
- B. Rs.10000
- C. Rs.12000
- D. Rs.18000

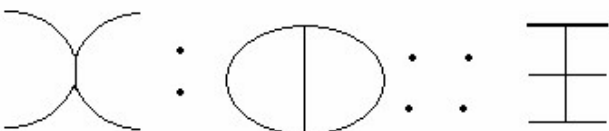
32. In  $\Delta ABC$ ,  $AB = AC$  and  $AD \perp BC$ ,  $BE \perp AC$  and  $CF \perp AB$ . Then,  $\Delta ABC$  is symmetrical about

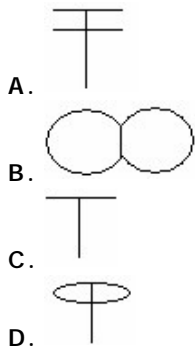
- A. AD
- B. BE
- C. CF
- D. None of these

33. Bisecting means dividing into two ..... parts.

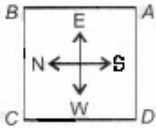
- A. Unequal
- B. Equal
- C. Triangular
- D. None of these

34. Which pattern completes the series?





35. A, B, C and D are standing on the four corners of a square field as shown in the adjoining figure. 'A' starts crossing the field diagonally. After walking half the distance, he turns right, walks some distance and turns left. Which direction is 'A' facing now?



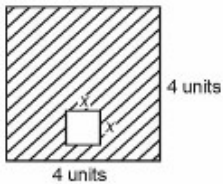
- A. East
- B. South-West
- C. South-East
- D. North-West

36. Mary and Jason were making propellers for their wooden helicopters. Mary put a number on her propeller and noticed that when she turned the propeller she had the same number. Jason was trying to think of a number that he could put on his that had the same rotational symmetry (looks the same turned upside down). What is the next larger number that has this property?



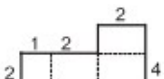
- A. 6009
- B. 5004
- C. 5007
- D. 1002

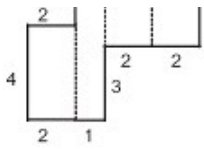
37. A square with a side  $x$  units is in side a square with a side of 4 units, as shown in the figure. Then the area of the shaded region in terms of  $x$  is



- A.  $16 + x^2$
- B.  $16 - x^2$
- C.  $16 - 2x$
- D.  $16 - 4x$

38. The area of the closed figure shown here, where all dimensions are in cm, is





- A.  $8 \text{ cm}^2$
- B.  $14 \text{ cm}^2$
- C.  $20 \text{ cm}^2$
- D.  $28 \text{ cm}^2$

39. The ratio of the number of men to the number of women in a factory is 5 : 9. There are 216 more women than men. If the number of men increases by 90 and the number of women decreases by 36, what will be the new ratio of the number of men to the number of women?

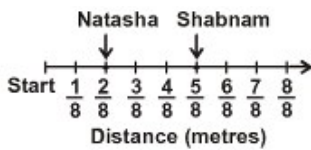
- A. 5:4
- B. 4:5
- C. 3:5
- D. 5:3

40. A school bus travels from Delhi to Palwal. There are 4 children, 1 teacher and 1 driver in the bus. Each child has 4 backpacks with him. There are 4 dogs sitting in each backpack and every dog has 4 puppies. What is the total number of eyes in the bus?

- A. 256
- B. 128
- C. 657
- D. 652

41. Shabnam and Natasha ran a race. The adjoining number line shows the distance the girls ran in four minutes.

What is the distance between Shabnam and Natasha after four minutes?



- A.  $1/4$  metres
- B.  $3/4$  metres
- C.  $3/8$  metres
- D.  $7/8$  metres

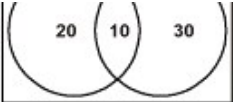
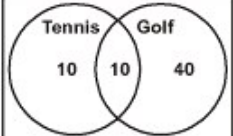
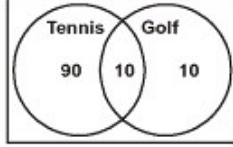
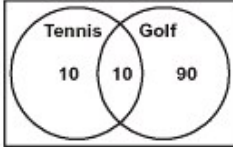
42. A coach conducted a survey to determine how many students plan to tryout tennis and golf. The results of the survey are shown below.

- (i) A total of 30 students plan to tryout tennis.
- (ii) A total of 40 students plan to tryout golf.
- (iii) 10 students plan to tryout both tennis and golf.

Which of the following diagrams best represents this information ?





- A. 
- Tryouts
- B. 
- Tryouts
- C. 
- Tryouts
- D. 

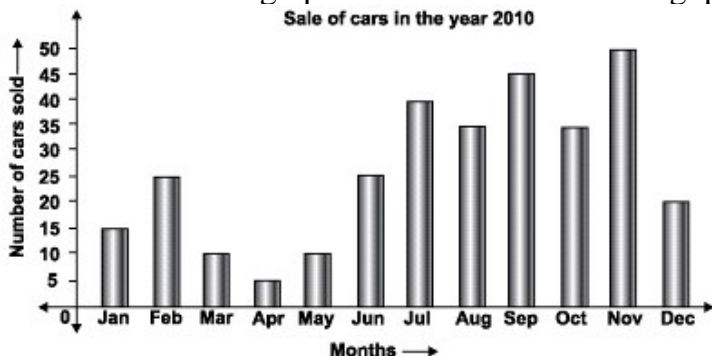
43. The weekly milk order of Aryan's shop includes 40 litres of low-fat milk and 15 litres of chocolate milk. What is the ratio of the litres of low-fat milk to chocolate milk in Aryan's weekly milk order?

- A. 3:1  
 B. 5:1  
 C. 5:3  
 D. 8:3
44. A coach asked 3 players on a basketball team to attempt 25 free throws each during practice. The given table shows the number of free throws each player made in 25 attempts. Based on the information in the table, which is the most reasonable prediction of the number of free throws Armaan will make out of his next 75 attempts?

**Free throws**

Player	Number of free throws made
Piyush	12
Siddharth	18
Armaan	5

- A. 12  
 B. 60  
 C. 15  
 D. 5
45. Look at the bar graph and answer the following question.



In which month only 15 cars were sold?

- A. January
- B. February
- C. April
- D. May

46. In the given fig. (X), which one of the options will replace the question mark?

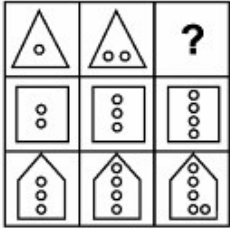
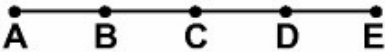


Fig. (X)

- A.
- B.
- C.
- D.

47. Count the number of line segments.



- A. 8
  - B. 12
  - C. 10
  - D. 13
48. In the given question there are four figure (A), (B), (C) and (D). Out of these four figures, three are similar in a certain way. However, one figure is not like the other three. Choose the figure which is different from the rest.

- A.
- B.
- C.
- D.

49. Which word describes the boxed number?

8  $x = y$

- A. Coefficient
- B. Equation
- C. Term
- D. Variable

50. Find the figure from the options which will continue the series established by problem figures.

Problem Figures



- A.
- B.
- C.
- D.