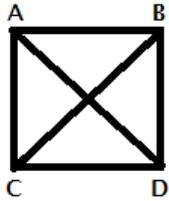


1. How many diagonals are there in polygon of 12 sides?

- A) 33 B) 55 C) 44 D) 54

2. If all the triangles in the figure have same perimeter and perimeter of square is 6 then perimeter of each triangle is:



- A)  $\frac{2}{3}$  B) 1 C)  $3(\sqrt{2} + 1)$  D)  $\frac{3}{2}(\sqrt{2} + 1)$

3. It takes Riaz 30 minutes to mark a paper, Razi only takes 25 minutes to mark a paper, if they both start marking a paper at 11:00 AM, what is the first time they will finish marking a paper at same time?

- A) 12:30 B) 12:45 C) 1:00 D) 1:30 E) 12:25

4. Divide Rs. 510 among A, B and C, so that A gets  $\frac{2}{3}$  of what B gets and B gets  $\frac{1}{4}$  of what C gets. What is share of A ?

- A) 60 B) 90 C) 180 D) 360

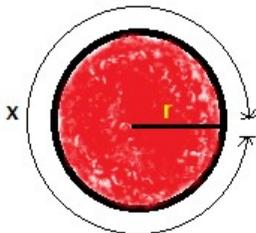
5. One-fifth of one-fifth of plot is sold Rs. 45000. What is the value of six-seventy fifth of the same plot?

- A) 60000 B) 75000 C) 90000 D) 105000 E) 120000

6. If 60% of A is 30% of B, then B is what percent of A ?

- A) 3% B) 30% C) 200% D) 300%

7. What is ratio of x to shaded region?



- A)  $\frac{2}{r}$  B)  $\frac{x}{r}$  C)  $\frac{1}{r}$  D)  $2\pi r$  E)  $\frac{\pi}{r}$

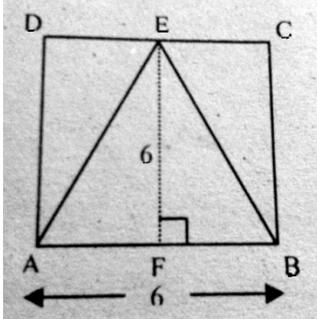
8. The average of even integers from 2 to 100, inclusive is?

- A) 49 B) 50 C) 51 D) 52

9. Mohsin is now three times the age of Mubeen. If after 4 years Mohsin's age is x, then what will be the age of Mubeen?

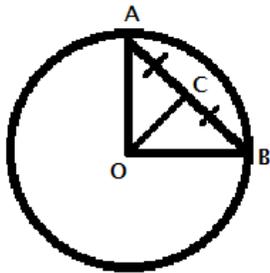
- A)  $\frac{x}{3}$  B)  $\frac{4x}{3}$  C)  $\frac{(x - 4)}{3}$  D)  $\frac{(x + 4)}{3}$  E) None

10. What is area of triangle ABCD?



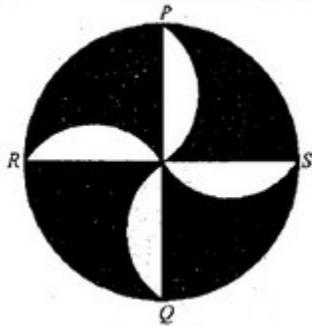
- A) 18 B) 24 C) 35 D) 36

11. If O is center of circle and angle CBO is  $40^\circ$  then what are values of angle BCO and angle COB.



- A)  $90^\circ, 50^\circ$  B)  $80^\circ, 60^\circ$  C)  $70^\circ, 70^\circ$  D)  $60^\circ, 80^\circ$  E)  $50^\circ, 90^\circ$

12. In the following figure PQ and RS are perpendicular and each of the non-shaded regions is semicircle. What is ratio of white area to shaded area?



- A)  $4/\pi$  B)  $1/1$  C)  $2/3$  D)  $1/2$

13. In a cigarette case full of cigars and cigarettes, probability of a cigarette is  $8/15$  what is ratio of cigars to cigarettes?

- A) 8:7 B) 7:15 C) 7:8 D) 15:7

14. In a camp sufficient food was provided to 500 men to last for 30 days. But after 25 days 2000 more men joined. How long the food will last for after joining of 2000 new men?

- A) 1 day B) 2 days C) 20 days D) 3 days

15. The average temperature of a week is  $33^\circ\text{C}$ . Average of first three days is  $30^\circ\text{C}$  while of the last three days is  $35^\circ\text{C}$ . What is temperature on fourth day of week?

- A) 33 B) 35 C) 36 D) 40

16. On a map, a distance of 100 cm represents 5km. If a street is 750 m long, what is its length in the map, in cm?

- A) 10 B) 15 C) 20 D) 35

17. A circular clock has RADIUS = 10 cm. Its smaller arm = 5 cm and longer one = 7 cm. What is angle between its two arms at 21:00 ?

- A)  $\pi/3$  B)  $\pi/4$  C)  $\pi/6$  D)  $\pi/2$

18. The population of a town increases by 15% per year and mortality rate is 10% per year. At present population is 4000. What will it be after two years?

- A) 4200 B) 4400 C) 4410 D) 4600

19. The shopkeeper bought 6 dozens and 3 eggs. Out of which 1 dozen and 6 eggs are rotten. The percentage of rotten eggs is?

- A) 20% B) 21% C) 22% D) 23% E) 24%

20. A frog is in a well 8ft. deep. The frog can jump 3ft. high but due to slippery surface it slips down by 2ft. How many jumps does he require to come out of the well?

- A) 8      B) 3      C) 7      D) 6

21. A column of men, extending 250 m in length takes one hour to march through a street at the rate of 50 paces per minutes, each pace being 75 cm. Find the length of the street.

- A) 4km      B) 4.5km      C) 2km      D) 1.5km

22. 12, 14, 34, 37, 57, 61, 81, ?

- A) 83      B) 84      C) 85      D) 86

23. [Odd man out]

- A) half      B) zero      C) double      D) Quarter      E) Equal

24. The difference of the ages of two brothers is 2 and the difference of the squares of their ages is 16. The age of smaller one is?

- A) 2      B) 3      C) 4      D) 5

25. Alia can complete a assignment in 5 days and Baber can complete the same assignment in 20 days. The time taken by both Alia and Baber to complete the assignment working together is:

- A) 2 days      B) 3 days      C) 4 days      D) 5 days

26. David cleaned his room by stuffing everything \_\_\_\_ his bed.

- A) in      B) on      C) under      D) along

27. There is a bridge \_\_\_\_\_ the river.

- A) Near      B) across      C) on      D) along

[Analogy]

28. Data processing: Raw data:: University:

- A) Teacher      B) Building      C) Students      D) Exams      E) Admission forms

29. Exodus [Antonym]

- A) Influx      B) Home coming      C) Return      D) Restoration

30. a Solitary place [Synonym]

- A) single      B) remote      C) imaginary      D) unaccomplished

31. A child was accompanying a woman. On being asked who the boy was, the woman said, His mother was the only daughter of my mother. How has the boy related to the woman?

- A) Son      B) Brother      C) Nephew      D) None

32. If three days ago was the day before Friday, what day will be after tomorrow?

- A) Wednesday      B) Monday      C) Tuesday      D) None

33. Mr. and Mrs. Gill have seven daughters and each daughter has one brother. How many people are there in the Gill family?

- A) 5      B) 10      C) 15      D) 20

34-40. In a game, exactly six inverted cups stand side by side in a straight line, and each has exactly one ball hidden under it. The cups are numbered consecutively 1 through 6. Each of the balls is painted a single solid color. The colors of the balls are green, magenta, orange, red and yellow. The balls have been hidden under the cups in a manner that confirms to the following conditions.

- The purple ball must be hidden under a lower-numbered cup than the orange ball.
- The red ball must be hidden under a cup immediately adjacent to the cup under which magenta ball is hidden.
- The green ball must be hidden under the cup 5.

**34. Which of the following could be the colors of the balls under the cups, in order from 1 through 6?**

- A) Green, yellow, magenta, red, purple, orange
- B) Magenta, green, purple, red, orange, yellow
- C) Magenta, red, purple, yellow, green, orange
- D) Orange, yellow, red, magenta, green, purple
- E) Red, purple, magenta, yellow, green, orange

**35. If the magenta ball is under cup 4, the red ball must be under cup?**

- A) 1 B) 2 C) 3 D) 5 E) 6

**36. A ball of which of the following colors could be under cup 6?**

- A) Green B) Magenta C) Purple D) Red E) Yellow

**37. If the purple ball is under cup 4, the orange cup must be under cup?**

- A) 1 B) 2 C) 3 D) 5 E) 6

**38. Which of the following must be true?**

- A) The green ball is under a lower numbered cup than the yellow ball.
- B) The orange ball is under a lower numbered cup than the green ball.
- C) The purple ball is under a lower numbered cup than the green ball.
- D) The purple ball is under a lower numbered cup than the red ball.
- E) The red ball is under a lower numbered cup than the yellow ball.

**39. If the orange ball is under cup 2, balls of which of the following colors could be under cups immediately adjacent to each other?**

- A) Orange and Magenta
- B) Green and Purple
- C) Orange and Yellow
- D) Purple and Red
- E) Red and Yellow

**40. If the magenta ball is under cup 1, balls of which of the following colors must be under cups immediately adjacent to each other**

- A) Green and Orange
- B) Green and Yellow
- C) Purple and Red
- D) Purple and Yellow
- E) Red and Yellow