1. Find the measure of the four angles of a quadrilateral if they are in the ratio 3:5:7:9.

2. The perimeter of a parallelogram is 150cm. one of its sides is greater than the order by 25cm. find the length of all sides of the parallelogram.

3. If the angles of a quadrilateral are $x^0, (2x + 13)^0, (3x + 10)^0, (x - 6)^0$, Find $x$.

4. Construct a rectangle ABCD in which AB = 6 cm and BC = 5 cm.

5. Construct a square ABCD of side 4.5 cm.

6. Represent the following distribution of ages (in years) of 35 teachers in a school by means of a histogram.

| Age (in years) | 25-30 | 30-35 | 35-40 | 40-45 | 45-50 |
|---|---|---|---|---|---|
| Number of teachers | 12 | 11 | 8 | 1 | 3 |

7. The way Mr. Sharma spends his allowance is given below.

| Item | percent |
|---|---|
| Lunch | 25% |
| Hobby | 20% |
| Recreation | 40% |
| Saving | 15% |
| Total | 100% |

8. The following table shows the number of students in a school playing five different games.

| Games | Football | Hockey | Cricket | Tennis | Squash |
|---|---|---|---|---|---|
| Number of students | 200 | 175 | 250 | 75 | 50 |

9.  The number of books lent out by a school library each day is shown in the following table.

| Day | Mon | Tue | Wed | Thurs | Fri |
|---|---|---|---|---|---|
| Number of books lent | 10 | 25 | 33 | 16 | 6 |

10. A card is drawn from a pack of 100 cards numbered 1 to 100. Find the probability of drawing a number which is a square.

11. A card is chosen at random from an ordinary deck of playing cards. What is the probability that     (a)  a diamond is chosen    (b)  a king is chosen    (c)  a black 4 is chosen    (d)   a 7 of hearts is chosen

12. A die is tossed once. What is the probability of the number "7" coming up? What is the probability of a number "less than 7" coming up?

13. Show that 1764 is a perfect square. Find the number whose square is 1764.

14. By what least number should 3675 be multiplied to get a perfect square number? Also, find the number whose square is the new number?

15. Find the least number of 4 digits, which is a perfect square.

16. Evaluate $\sqrt{4356}$.

17. Find $\sqrt{98} \times \sqrt{162}$.

18. Evaluate: $\sqrt{10.0489}$.

19. Find the least number which must be subtracted from 2361 to make it a perfect square.

20. Show that 6192 is not a perfect square.

21. Express 64 as the sum of 8 odd natural numbers.

22. Find the least square number which is exactly divisible by each of the numbers 6, 9, 15 and 20.

23. Show that 216 is a perfect cube. Find the number whose cube is 216.

24. What is the smallest number by which 1323 may be multiplied so that the product is a perfect cube?

25. Find the cube root of $\frac{125}{2744}$.

26. Find the value of $\sqrt[3]{3375 \times 729}$

**27.** $\sqrt[3]{-1728} + \sqrt{324}$

**28.** Evaluate $\sqrt[3]{\sqrt{0.000729}} + \sqrt[3]{0.008}$

**29.** What is the smallest number by which 1375 should be divided so that the quotient may be a perfect cube?

**30.** Find the edge of a cuboidal box whose volume is 13824 cm³.

**31.** What is the cost price of an article which is sold at a loss of 25% for ₹150?

**32.** Find the discount and the amount actually paid if a shirt having a price tag of ₹600 is sold at 15% discount.

**33.** The price of a garment has been reduced by 15% in a sale to ₹306. Find its original price.

**34.** Write the ratio 21 : 25 as percentage.

**35.** Find each angle of a parallelogram if two consecutive are in the ratio 1:3.

**36.** The sum of three consecutive multiples of 7 is 777. Find these multiples.

**37.** The difference between two positive integers is 50 and the ratio of these integers is 1:3. Find these integers.

**38.** Sum of two numbers is 10. If one exceeds the other by 12, find the numbers.

**39.** The present age of Sahil's mother is three times the present age of Sahil. After 5 years their ages will add to 66 years. Find their present ages.

**40.** Solve: $\frac{2}{3}\left(x + \frac{3}{5}\right) = \frac{7}{2}$

**41.** What number should be subtracted from $\left(\frac{3}{4} + \frac{1}{3} + \frac{2}{5}\right)$ to get $\frac{1}{2}$ ?

**42.** What number should be added to $-\frac{4}{7}$ to get $\frac{5}{9}$?

**43.** Represent $\frac{2}{5}$ and $-\frac{2}{5}$ on the number line.

**44.** Arrange $-\frac{5}{3}, \frac{3}{4}, \frac{5}{-6}$ in descending order.

**45.** Find four rational numbers between $\frac{1}{3}$ and $\frac{1}{4}$ .

**46.** -36) x $\left(-\frac{35}{76}\right)$ x $\left(\frac{19}{15}\right)$ x $\left(\frac{3}{-2}\right)^{-1}$ = _____ ?

**47.** Arrange and simplify: $\frac{3}{5} + \frac{5}{3} + \left(-\frac{11}{5}\right) + \left(-\frac{2}{3}\right)$

**48.** Increase 320 by 20%.