CLASS X
GUESS PAPER
MATHS

CHAPTERWISE QUESTIONS

Note: The questions given below are most frequently askedquestions. Only the figures questions might change, however, the statements remain almost same.

Quadratic Equations

1. Two pipes can fill a tank in $4\frac{4}{5}$ hours. If one pipe takes 4 hours more than the other to fill the tank, find the time taken separately by each pipe.
2. An auditorium has as many rows of seats as there are number of seats in each row. If the number of rows is increased by 5 and the number of seats in each row increased by 2, then the capacity of the auditorium increases by 220. Find the original arrangement.
3. A Officer on tour has Rs.1500 for his expenses. If he extends by 5 days then he would have to cut down his daily expenss by Rs.15. Find the original duration of tour.
4. A sum of Rs. 4500 was distributed equally among some children of a hostel. Had there been 5 more children, each child would have got Rs.30 less. Find the number of children.
5. An express train takes 25 minutes less to cover a distance of 300 km. If the speed of the express train 10 km/h more than the passenger train find the speed of each train.
6. A person bought some books for Rs.144. Had he bought 3 more books for the same amount, then each book would have cost Rs. 4 less. Find the number of books bought and rate per book.
7. A farmer wants to fence his kitchen garden making use of wall of his house for one side. For the rest three sides hehas70 m of barbed wire. If the area of the kitchen garden is 600 m^2, find the dimensions of the garden.
8. Perimeter of a right triangle is 56 cm. Its hypotenuse is 25 cm. Find the other two sides.
9. The hypotenuse of a right triangle is 5 cm more than 4times the shortest side. The third side is one cm less than the longest side. Find the sides of the triangle.
10. Divide 60 into two parts such that square of the smaller part exceeds 19 times the smaller part by 30.
11. Difference between squares of two numbers is 180. Square of the smaller number is 8 times the larger number. Find the numbers.

12. Students of class planned a picnic. The budget for the food was Rs.6000.Ten students failed to turn up, as a result each of the rest of students had to pay Rs. 50 more. Find the number of students participating in the picnic.
13. A plane left 45 minutes late due to bad weather. In order to reach its destination 3000km away on time the speed of the plane was increased by 200 km/h. Find the usual speed of the plane.
14. A factory owner expenditure on daily wages is Rs. 3000. By reducing the number of employees by 3 and increasing the wages by Rs.50 he incurs no additional expenditure. Find the number of employees.
15. Find three consecutive natural numbers sum of whose squares is 302.
16. Anil bought certain length of cloth for Rs.300. Had the rate per metre been Rs. 5 less and had he bought one more metre of cloth he would have incurred additional expenditure of Rs.105. Find the original rate and length of cloth.
17. Area of rectangle is 40 cm^2. If the length and breadth both increased by 3 cm and 5 cm respectively, the area of the rectangle increases by 70 cm^2. Find the dimensions of the rectangle.
18. The product of the digits of a two-digit number is 24. The number obtained by reversing the digits is 18 less than original number. Find the number.
19. A sail boat goes 40 km downstream and returns in 10 ⅔ hours. If the speed of the boat is 8 km/h find the speed of the stream.

Arithmetic Progression

20. How many terms of the A.P. 4,9,14,19.. sum up to 555?
21. Cost of a washing machine is Rs.18,000. Anil agrees to pay Rs. 6000 as cash down payment and the rest in ten equal instalments. If the interest at 8% is charged on the outstanding balance, find the cost of the washing machine.
22. Seven cash prizes totaling to Rs. 280 are to be awarded in a competition. If value of each prize is Rs.10 less than the previous one, find the value of each prize.
23. 99 logs are arranged on the ground in horizontal rows one above the other. If the bottom most row contains 15 logs and each of the rows above it contain one log less than the previous row find the number of rows.
24. A person borrows Rs.30,000 to be repaid in 30 instalments that form an A.P. After paying 20 instalments the person dies leaving 40% of the loan unpaid. Find the value of the first three instalments.
25. If pth term of A.P. is'q' and qth term is 'p' show that (p+q)th term is zero.
26. A ladder is 2.5 m long. Rungs are attached to it at distances of 25 cm. If the length of the lowest rung is 45 cm and that of the top most rung is 25 cm find the total length of the rungs.
27. In a potato race six potatoes are kept at a distance of 5 m each. The starting point is 3 m away from the first potato. A child has to deposit the potatoes at the starting point one by one, starting from the starting point. Find the distance covered by the child in doing so.
28. How many terms of te A.P. 54,51,48…needed to give a sum of 513. Explain the double answer.

29. If sum 'n' '2n' and '3n' terms of an A.P. are S_1, S_2 and S_3 respectively show that $S_3 = 3(S_2-S_1)$
30. Find the sum of all 3-digit numbers not divisible by 7
31. FInd sum of all 2-digit numbers divisible by 8.
32. Sum of 'n' terms of an A.P. is given by $\frac{3n^2+11}{2}$ Find the A.P. an sum of its first 20 terms.
33. Sum of first 10 terms of an A.P> is 250 and sum ofnext eight terms is 448 Find the A.P>
34. The ages of group of boys have a common difference of 4 months. The youngest boy is 8 years old and sum of ages of all the boys in the group is 580 years. Find the number of boys in the group.
35. 180 workers are appointed to do job in certain number of days. From second day onwards 4 workers dropped every day, as a result the completion of work is delayed by 14 days. Find the number of days it was to be completed.
36. Ravi repays a loan of Rs.6500 in instalments that form an A.P. He pays Rs.50 in the first month and increases every month by Rs.60 In what period the loan will be cleared.