



**Octahedral classes, kharadi**  
**2nd floor, yashwant plaza, near bank of India, kharadi**

**Class 08 - Mathematics**

**Linear equation**

**Maximum Marks: 30**

**Time Allowed: 1 hour and 30 minutes**

**Section A**

1. The perimeter of a rectangular swimming pool is 154 m. Its length is 2 m more than twice its breadth. What are the length and the breadth of the pool ? 2
2. Three consecutive integers are such that when they are taken in increasing order and multiplied by 2, 3 and 4 respectively, they add up to 74. Find these numbers. 2
3. If you subtract  $\frac{1}{2}$  from a number and multiply the result  $\frac{1}{2}$ , you get  $\frac{1}{8}$ . What is the number ? 2
4. One of the two digits of a two digit number is three times the other digit. If you interchange the digits of this two-digit number add the resulting number to the original number, you get 88. What is the original number ? 2
5. The number of boys and girls in a class are in the ratio 7 : 5. The number of boys is 8 more than number of girls. What is the total class strength ? 2
6. The base of an isosceles triangle is  $\frac{4}{3}$  cm. The perimeter of the triangle is  $4\frac{2}{15}$  cm. What is the length of either of the remaining equal sides ? 2
7. Half of a herd of deer are grazing in the field and three fourths of the remaining are playing nearby. The rest 9 are drinking water from the pond. Find the number of deer in the herd. 2
8. Lakshmi is cashier in a bank. She has currency notes of denominations Rs 100, Rs 50 and Rs 10, respectively. The ratio of the number of these notes is 2 : 3 : 5. The total cash with Lakshmi is Rs 4,00,000. How many notes of each denominations does she have ? 2
9. A positive number is 5 times another number. If 21 is added to both the numbers, then one of the new numbers become twice the other new number. What are the numbers ? 2
10. The organisers of an essay competition decide that a winner in the competition 2

gets a prize of Rs 100 and a participant who does not win gets a prize of Rs 25. The total prize money distributed is Rs 3,000. Find the number of winners, if the total number of participants is 63.

11. Baichung's father is 26 years younger than Baichung's grandfather and 29 years older than Baichung. The sum of the ages of all the three is 135 years. What is the age of each one of them ? 2
12. Solve the following equations :  $\frac{2x}{3} + 1 = \frac{7x}{15} + 3$  2
13. The ages of Rahul and Haroon are in the ratio 5 : 7. Four years later the sum of their ages will be 56 years. What are their present ages? 2
14. I have a total of Rs 300 in coins of denomination Re 1, Rs 2 and Rs. 5. The number of Rs 2 coins is 3 times the number of Rs 5 coins. The total number of coins is 160. How many coins of each denomination are with me ? 2
15. Amina thinks of a number and subtracts  $\frac{5}{2}$  from it. She multiplies the result by 8. The result now obtained is 3 times the same number she thought of. What is the number ? 2