8th Linear Equations of one or two Variables

CBSE TEST PAPER – 5

1.A boat goes 30km upstream and 44km downstream in 10 hours. In 13 hours, it can go 40km upstream and 55km down-stream Determine the speed of the stream and that of the boat in still water.

2. The sum of the digits of a two-digit number is 9. Also, nine times this number is twice the number obtained by reversing the order of the digit. Find the number.

3. The area of a rectangle gets reduced by 9 square units, if its length is reduced by 5 units and breadth is increased by 3 units. If we increase the length by 3 units and the breadth by 2 units, the area increases by 67 square units. Find the dimensions of the rectangle.

4. 2 women and 5 men can together finish an embroidery work in 4 days, while 3 women and 6 men can finish it in 3 days. Find the time taken by 1 woman alone to finish the work, and also that taken by 1 man alone.

5. Roohi travels 300km to her home partly by train and partly by bus. She takes 4 hours if she travels 60km by train and the remaining by bus. If she travels 100km by train and the remaining by bus, she takes 10 minutes longer. Find the speed of the train and the bus separately.

6. A boat goes 30km upstream and 44km downstream in 10 hours. In 13 hours, it can go 40km upstream and 55km down-stream Determine the speed of the stream and that of the boat in still water.

7. Five years ago, Nuri was thrice as old as Sonu. Ten years later, Nuri will be twice as old as Sonu. How old are Nuri and Sonu?

8. A part of monthly hostel charges is fixed and the remaining depends on the number of days one has taken food in the mess. When a student A takes food for 20 days she has to pay Rs 1000 as

hostel charges whereas a student B, who takes food for 26 days, pays Rs 1180 as hostel charges. Find the fixed charges and the cost of food per day.

9. Yash scored 40 marks in a test, getting 3 marks for each right answer and losing 1 mark for each wrong answer. Had 4 marks been awarded for each correct answer and 2 marks been deducted for each incorrect answer, then Yash would have scored 50 marks. How many questions were there in the test?

10. Places A and B are 100km apart on a highway. One car starts from A and another from B at the same time. If the cars travel in the same direction at different speeds, they meet in 5 hours. If they travel towards each other, they meet in 1 hour. What are the speeds of the two cars?

11. A no. consists of three digits whose sum is 17. The middle one exceeds the sum of other two by 1. If the digits are reversed, the no. is diminished by 396. Find the no.

12. A boatman rows his boat 35 km upstream and 55 km down stream in 12 hours. He can row 30 km. upstream and 44 km downstream in 10 hours. Find the speed of he stream and that of theboat in still water. Hence find the total time taken by the boat man to row 50 cm upstream and 77 km downstream.

13. Ashok covers 60 km in 1½ hours with the wind and 2 hours against the wind. Find the speed of the Ashok and speed of the wind.

14. The distance between school and metro station is 300 m. Kartikay starts running from school towards metro station, while Ashu starts running from metro station to school. They meet after 4 minutes. Had Kartikay doubled his speed and Ashu reduced his speed to third of the original they would have met one minute earlier. Find their speeds.

15. Puru chase Vinayak who is 5 km ahead. Vinayak is travelling at a speed of 80 km/h and Puru chase at an average speed of 90 km/h. After how much time Puru met Vinayak.

16. In a unit-test the no. of hose that passed and the no. of these that failed were in the ratio 3:1. Had 8 more appeared and 6 less passed, the ratio of passes to failures would have been 2:1. Find how many appeared?

17. In a function if 10 guests are sent from room A to B, the no. of guests in room A and B are same. If 20 guests are sent from B to A, the no. of guests in A is double the no. of guests in B. Find no. of guests in both the rooms in the beginning.

18. In a function Madhu wished to give Rs. 21 to each person present and found that she fell short of Rs. 4 so she distributed Rs. 20 to each and found that Rs. 1 were left over. How much money did she gave and how many persons were there.

19. A mobile company charges a fixed amount as monthly rental which includes 100 minutes free per month and charges a fixed amount these after for every additional minute. Abhishek paid Rs. 433 for 370 minutes and Ashish paid Rs. 398 for 300 minutes. Find the bill amount under the same plain, if Usha use for 400 minutes.

20. Places A and B are 80 km apart from each other on a highway. A car starts from A and another from B at the same time . If they moves in the same direction, they meet in 8 hours and if they move in opposite directions, they meet in 1 hours and 20 minutes. Find the speed of the cars