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**Grade: X Pair of linear equations in two variables**

1. In each of the following systems of equations determine whether the system has a unique solution, no solution or infinitely many solutions. In case there is an unique solution, find it

 (i)  (ii) 

 (ii) , .

2. For each of the following systems of equations determine the value of ‘k’ for which the given system of equations has a unique solution.

 (i)  (ii) 

 (iii)  (iv) 

3. For each of the following systems of equations determine the value of ‘k’ for which the given system of equations has infinitely many solutions.

 (i)  (ii) 

 (iii) 

4. For each of the following systems of equations determine the value of ‘k’ for which the given system of equations has no solutions.

 (i)  (ii) 

5. Find the value(s) of ‘k’ for which the system of equations has (i) unique solution (ii) no solution

6. For what value of ‘a’ and ‘b’ for which the following system of linear equations has infinite solutions .

7. For what value of ‘k’ will the following system of equations have infinitely many solutions: 

8. Find the value of ‘k’ for which the system of equations  has infinite solutions.

9. Find the values of ‘p’ and ‘q’ for which the system has infinite number of solutions.

10. Find the value of for which the system has (i) unique solution (ii) no solutions?

11. Determine the value of ‘k’ so that the following linear equations have no solution. .

12. Find the value of ‘k’ for which the system has infinite solutions

 (i)

 (ii) 

13. Solve: 

14. Solve: 

15. Solve: 

16. Solve: 

17. Solve: 

18. Solve: 