Linear Equations in Two variables

1) Sachin and Sehwag scored 137 runs together. Express the information in the form of an equation.

2) Hema's age is 4 times the age of Mary. Write a linear equation in two variables to represent this information.

3) A number is 27 more than the number obtained by reversing its digits. If its unit's and ten's digits are x and y respectively, write the linear equation representing the above statement.

4) Express each of the following equations in the form of ax + by + c = 0 and write the values of a, b and c.
   i) 3x + 4y = 5 ii) x - 5 = 3y
   iii) 3x = y iv)x/y + y/2 -1/6
   v) 3x - 7 = 0

5) Write each of the following in the form of ax + by + c = 0 and find the values of a, b and c
   i) x = -5
   ii) y = 2
   iii) 2x = 3
   iv) 5y = -3

6) Check which of the following are solutions of an equation x + 2y = 4? (Complete the table wherever necessary)
   i) (0, 2) ii) (2, 0) iii) (4, 0) (iv) (2,- 3 2)
   v) (1, 1) vi) (- 2, 3)

7) If x = 3, y = 2 is a solution of the equation 5x - 7y = k, find the value of k and write the resultant equation.

8) If x = 2k + 1 and y = k is a solutions of the equation 5x + 3y - 7 = 0, find the value of k.

9) Write the equation of three lines that are
   (i) parallel to the X-axis (ii) parallel to the Y-axis.

10) Write the equation of the line parallel to Y-axis and passing through the point
   i) (–4, 0) ii) (2, 0) iii) (3, 5) iv) (–4, –3)