Class – 10th   **Chapter-4**   **Subject Maths**

Worksheet-12   *Linear Equation and Inequalities*

1. Show the solution set of the folowing inequalities, graphically.

   (i) $x \geq 2$ (ii) $y \leq -3$ (iii) $x - 2y < 0$ (iv) $2x + 3y \leq 6$

2. Solve the following inequalities by graphical method :

   (i) $|x| \leq 3$ (ii) $3x - 2y \leq x + y - 8$ (iii) $|x - y| \geq 1$

3. For which value of k, linear pair $x + y - 4 = 0$; $2x + ky - 3 = 0$ have no solution :

   (a) 0   (b) 2   (c) 6   (d) 8

4. For which value of k, linear pair $3x - 2y = 0$ and $kx + 5y = 0$ have infinite solutions :

   (a) $\dfrac{1}{2}$ (b) 3   (c) $\dfrac{-5}{3}$ (d) $\dfrac{-15}{2}$