

class- IX Maths Chapter-4 Linear equations in two variables
Assignment-7 Part-a

- Q.1. Draw the graph of $\frac{2x}{3} + 5 = 0$.
- Q.2. Draw the graph of $3y - 2 = 7x + 5$.
- Q.3. Solve the equation $4x + 1 = 3x - 5$ and represent the solution on (i) the number line
(ii) the cartesian plane.
- Q.4. Give the geometric representation of $2y - 1 = y$ as an equation (i) in one variable
(ii) in two variables.
- Q.5. Draw the graph of the line $4x + 3y = 24$.
(i) Write the coordinates of the points where this line intersects the x-axis and the y-axis.
(ii) From your graph, find the value of x when $y = 4$.
- Q.6. Draw the graphs of the lines $x - y = 1$ and $2x + y = 8$. Shade the area formed by these two lines and the y-axis, find this area.
- Q.7. Draw the graph of $x = 0$ & $y = 0$.
- Q.8. Two students A and B contributed Rs 100 towards a Relief Fund to help the poor. Write a linear equation to satisfy the above data and draw its graph.

Assignment - 7 Part-6

Q.9. There are two scales of measuring the temperature of a liquid, namely Kelvin (K) and Fahrenheit (F). The relation between the two scales is given by $F = \frac{9}{5}(K - 273) + 32$.

(i) Draw the graph.

(ii) From the graph, fill in the blanks

$95^{\circ}F = \dots K$ & ~~$300K = \dots^{\circ}F$~~

$95^{\circ}F = \dots K$ & $300K = \dots^{\circ}F$

Q.10. The force exerted to pull a cart is directly proportional to the acceleration produced in the body. Express the statement as a linear equation of two variables and draw the graph of the same by taking the constant mass equal to 6 kg. Read from the graph the force required when the acceleration produced is

(i) 5 m/sec^2 (ii) 6 m/sec^2