$\therefore 4 + 0 = k$

$\therefore k =$ 4

5) To find the values of x and y for the equations $x - 2y = 5$ and $2x + 3y = 10$ complete the activity.

$$D = \begin{vmatrix} 1 & -2 \\ 2 & 3 \end{vmatrix} = 3 + 4 = 7$$

$$D_x = \begin{vmatrix} 5 & -2 \\ 10 & 3 \end{vmatrix} = 35$$ 15 + 20

$$D_y = \begin{vmatrix} 1 & 5 \\ 2 & 10 \end{vmatrix} = 0$$ 10 − 10

By Cramer's rule

$X = \frac{Dx}{D} =$ 5 , $y = \frac{Dy}{D} =$ 0

Q. 2 B) Each of 2 marks

1) The difference between an angle and its complement is 10° find measure of larger angle.

2) Find the value of $\begin{vmatrix} 5 & 2 \\ 0 & -1 \end{vmatrix}$ = −5

3) For the equation $y + 2x = 19$ and $2x - 3y = -3$ Find the value of D = 8

4) In the equation $2x - y = 2$ if $x = 3$ then find y=? 4

5) If $(2, -5)$ is the solution of the equation $2x - ky = 14$ then find k =? 2

6) For the equation $a + 2b = 7$ find a when $b = 4$, a = −1