2(ii) $3x + y = 1$
$(2k-1)x + (k-1)y = 2k+1$

$\frac{a_1}{a_2} = \frac{3}{2k-1}$ | $\frac{b_1}{b_2} = \frac{1}{k-1}$ | $\frac{c_1}{c_2} = \frac{1}{2k+1}$

For no solution

$\frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$

$\frac{3}{2k-1} = \frac{1}{k-1} \neq \frac{1}{2k+1}$

$\frac{3}{2k-1} = \frac{1}{k-1}$

$\Rightarrow 3(k-1) = 2k-1$

$\Rightarrow 3k-3 = 2k-1$

$\Rightarrow 3k-2k = -1+3$

$\Rightarrow k = 2$

$\frac{a_1}{a_2} = \frac{3}{2k-1} = \frac{3}{4-1} = \frac{3}{3} = 1$

$\frac{b_1}{b_2} = \frac{1}{k-1} = \frac{1}{2-1} = 1$

$\frac{c_1}{c_2} = \frac{1}{2\times2+1} = \frac{1}{5}$

$\therefore \frac{a_1}{a_2} = \frac{b_1}{b_2} \neq \frac{c_1}{c_2}$

which satisfies the condition

(3) $8x + 5y = 9 \quad \ldots (i)$
$3x + 2y = 4 \quad \ldots (ii)$

$\Rightarrow x = \frac{4-2y}{3} \quad \ldots (iii)$

Sub (i)

$8\left(\frac{4-2y}{3}\right) + 5y = 9$

$(\times 3)$

$8(4-2y) + 15y = 27$

$\Rightarrow 32 - 16y + 15y = 27$

$\Rightarrow -y = 27 - 32$

$\Rightarrow -y = -5$

$\Rightarrow y = 5$

Sub (iii)

$x = \frac{4-2\times5}{3} = \frac{4-10}{3} = \frac{-6}{3} = -2$

2	3	1	2
5	9	8	5
2	4	3	2

$\frac{x}{20-18} = \frac{y}{27-32} = \frac{-1}{16-15}$

$\Rightarrow \frac{x}{2} = \frac{y}{-5} = \frac{-1}{1}$

$\frac{x}{2} = -1 \Rightarrow x = -2$ | $\frac{y}{-5} = -1 \Rightarrow y = 5$

$\boxed{\therefore x = -2, y = 5}$