

کفلین شماره 15 - A

لیکسنری

الف) $m = \frac{2+2}{4-5} = -4 \Rightarrow y = -4x + b$

$|4| \Rightarrow 8 = -16 + b = 18 \Rightarrow y = -4x + 18$

ج) $y = \frac{1}{3}x \Rightarrow m = \frac{1}{3} \Rightarrow m' = 3 \Rightarrow y = 3x - 6$

ب) $b = 14$ $\Rightarrow y = -3x + 14$

$\Rightarrow y = -3x + 14$

$\Rightarrow \frac{x}{3} = 60^\circ$

$\Rightarrow \tan 60^\circ = \sqrt{3}$

$\Rightarrow y = \sqrt{3}x + 2 - 4\sqrt{3}$

الف) $\sqrt{(2+1)^2 + (3-7)^2} = \sqrt{25} = 5$

$\Rightarrow 4y + 3x - 3 = 0$

$\alpha = \frac{15}{5} = 3$

الف) $m = -\frac{2}{3}$ $b = \frac{8+12}{2} = 10$

$y = -\frac{2}{3}x + 10$

$\Rightarrow \frac{2}{\sqrt{13}} = \frac{2\sqrt{13}}{13}$
 $\frac{18-6}{\sqrt{4+9}}$

~~$|2x + 3y - 1| = \frac{|2x + 3y - 3|}{\sqrt{13}}$~~

$\frac{|3x - 2y - 1|}{\sqrt{13}} = \frac{|2x + 3y - 3|}{\sqrt{13}}$

① $\Rightarrow 3x - 2y - 1 = -2x - 3y + 3$

$\Rightarrow y = -5x + 4$

② $\Rightarrow 3x - 2y - 1 = 2x + 3y - 3$

$\Rightarrow 5y = x + 2 \Rightarrow y = \frac{x}{5} + \frac{2}{5}$

$\frac{|5|}{|5|} = 1$ $\tan \alpha = 1 \Rightarrow \alpha = 45^\circ$

الف) $\alpha = \sqrt{(-2-4)^2 + (3+5)^2} = 10$

$\Rightarrow y' = \frac{-2+4}{2} = 1$

$\left| \frac{-1}{3} \right|$

$x' = \frac{3-5}{2} = -1$

الف) $\frac{3-2-6}{3} = -3 = x'$

$y = \frac{1+3-13}{3} = -3$
 $\begin{matrix} -3 \\ -3 \end{matrix}$

$\Rightarrow \begin{vmatrix} 3 & 1 & 1 \\ -2 & 3 & 1 \\ -6 & -13 & 1 \end{vmatrix} = \frac{1}{2} \times (96) = 48$

$$\text{الف) } y = \frac{-2x-1}{4x-3} \quad \rightarrow \quad y = \frac{2x+1}{-4x-3}$$

$$\text{ج) } y = \frac{3x+1}{4x-2} \quad \rightarrow \quad y = \frac{-3x+1}{4x+2}$$

$$\text{الف) } x' = x-2 \Rightarrow x = x' + 2$$

$$y' = y+3 \Rightarrow y = y' - 3$$

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

$$\rightarrow x' = x+3 \Rightarrow x = x' - 3$$

$$y = \frac{7}{x}$$

$$y' = y-2 \Rightarrow y = y' + 2$$

الف)

$$\begin{cases} 3x+4y=2 \\ 3x-15y=3 \end{cases} \Rightarrow 19y = -1 \Rightarrow y = -\frac{1}{19}, \quad x = \frac{14}{19}$$

$$\rightarrow \begin{cases} 3x+4y=2 \\ x-5y=1 \end{cases}$$

$$x = \frac{14}{19}, \quad y = -\frac{1}{19}$$