

1a) or 2a)

بار (3) A

البيان الثاني

$$(2, -2) (4, 2) \rightarrow \frac{y_2 - y_1}{x_2 - x_1} = \frac{4}{2} = 2 \quad (-2x + 18)$$

$$y = -2x - 1 \rightarrow \text{نقطه} = -3 \rightarrow (-3x + 12)$$

$$y = -x + 1 \rightarrow y = -\frac{1}{3}x + 1 \rightarrow \text{نقطه} : -\frac{1}{3} \rightarrow 3 \quad (3x - 10)$$

$$\tan \theta = \sqrt{3} \quad (\sqrt{3}x - 4\sqrt{3} + 2)$$

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$$(2, 3) (-1, 7) \quad \sqrt{\Delta y^2 + \Delta x^2} = \sqrt{9 + 16} = 5 \quad (\text{ب})$$

$$3x + 4y - 13 = 0 \quad \frac{|4 + 12 - 13|}{5} = \frac{3}{5} = 0.6$$

$$2x + 3y = 4 \quad \frac{4 + 6}{5} = 2 \quad (2x + 3y = 4) \rightarrow 3y = -2x + 4$$

$$2x + 3y = 4$$

$$4 - 2 = 2$$

$$\frac{|C - C'|}{\sqrt{A^2 + B^2}} = \frac{2}{\sqrt{13}} \rightarrow \frac{2\sqrt{13}}{13}$$

~~1b) or 2b)~~

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

$$3x - 2y - 1 = 2x + 3y - 3 \rightarrow x - 5y = -2 \rightarrow -5y = -x - 2 \rightarrow y = \frac{x + 2}{5}$$

$$3x - 2y - 1 = -2x - 3y + 3 \rightarrow 5x + y = 4 \rightarrow y = -5x + 4$$

$$y = 2x + 4 \rightarrow m = 2$$

$$y = -2x + 3 \rightarrow m' = -2$$

$$\frac{|m - m'|}{1 + mm'} = \tan \alpha \rightarrow \frac{2 - (-2)}{1 + (-4)} = \left| \frac{4}{-3} \right| = 1$$

$$\alpha = \frac{\pi}{4}$$

$$(-4, 4) (3, -2) \quad \sqrt{\Delta x^2 + \Delta y^2} = \sqrt{49 + 36} = 10$$

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$$\frac{-4 + 3}{2} = -0.5 \quad \frac{4 - 2}{2} = 1 \quad (-1, 1)$$

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

$$\frac{1 + 3 - 13}{3} = -3 \quad (-3, -3)$$

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$$\begin{array}{l} 3, 1 \\ -2, 3 \\ -10, -13 \\ 3, 1 \end{array} \quad \frac{1}{3} (9 + 2y - 10 + 2 + 30 + 3y) = \frac{9y}{3} = 31$$

$$1) -y = \frac{2x+1}{5x-3}$$

$$2) y = \frac{-2x+1}{-5x-3}$$

$$3) x = \frac{y+1}{5y-3} \rightarrow y = \frac{3x+1}{5x-2}$$

$$4) -x = \frac{\frac{2y+1}{5y+3}}{-5y-3} = \dots$$

$$y = \dots \rightarrow \frac{3x-1}{5x+2}$$

$$\left. \begin{array}{l} x' = x - 2 \\ y' = y + 3 \end{array} \right\} \begin{array}{l} x = x' + 2 \\ y = y' - 3 \end{array} \quad \frac{2(x'+2)+1}{x'+2-3} = y'-3$$

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(الف)

$$\frac{2x+1}{x-1} + 3 \rightarrow \frac{2x'+2}{x'-1} = y'$$

$$x = x' + 2$$

$$y = y' + 3$$

$$\frac{2(x'+3)+1}{x'+3-3} = \frac{2x'+7}{x'} = y' \rightarrow y' = \frac{2x'+7}{x'}$$

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$$\left. \begin{array}{l} 3x + 4y = 2 \\ (-3)x + 10y = -3 \end{array} \right\} \begin{array}{l} 19y = -1 \\ y = -\frac{1}{19} \end{array} \quad \begin{array}{l} x = \frac{14}{19} \end{array} \quad (الف)$$

-10

$$x = - \frac{\begin{vmatrix} 4 & 2 \\ -3 & 1 \end{vmatrix}}{\begin{vmatrix} 3 & 4 \\ -3 & 10 \end{vmatrix}} = - \frac{4 - (-10)}{-10 - (-12)} = - \frac{14}{-19} = \frac{14}{19}$$

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$$y = \frac{\begin{vmatrix} 3 & 2 \\ 1 & 1 \end{vmatrix}}{\begin{vmatrix} 3 & 4 \\ -3 & 10 \end{vmatrix}} = \frac{3 - 2}{-19} = -\frac{1}{19}$$