

A(-2, k), B(4, m)

$\vec{AB} = -\frac{1}{2}$

$\vec{AB} = \frac{m-k}{4-(-2)} = \frac{-1}{2} \rightarrow \frac{m-k}{6} = \frac{-1}{2} \rightarrow m-k = -3$

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$AB = \sqrt{(4+2)^2 + (m-k)^2} = \sqrt{36} = 6$

A(-1, 2), B(3, 1), C(x, y), D(-1-x, y+3)

$CD \parallel BA \Rightarrow \frac{y-1}{x-3} = \frac{1-2}{3-(-1)} = -\frac{1}{4} \Rightarrow y-1 = -\frac{1}{4}(x-3) \Rightarrow y = -\frac{1}{4}x + \frac{7}{4}$

$\frac{y-1}{x-3} = \frac{1-2}{3-(-1)} = -\frac{1}{4}$

$|AB| = 2$
 $|BC| = \frac{2}{\sqrt{5}}$

$2(\frac{2}{\sqrt{5}} + \frac{3}{4}) = 1.5$

$CD = \sqrt{(\frac{3}{4})^2 + (y-y-3)^2} = \sqrt{9} = 3$

$AC = \sqrt{(-1-\frac{3}{4})^2 + (2-y)^2} = BD = \sqrt{(\frac{3}{4}+\frac{3}{4})^2 + (1-y-3)^2}$
 $\frac{2}{\sqrt{5}} + 1 - 1 + y = \frac{2}{\sqrt{5}} + 1 + y = 1 + y \Rightarrow y = -1$

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$2\omega = 2(\omega + \frac{1}{2}\omega) = 2\omega$

$2mx + (m^2 - 1)y = 3$

$\alpha = \tan \theta_0 = \frac{\sqrt{3}}{2} \Rightarrow \frac{-2m}{m^2-1} = \frac{\sqrt{3}}{2} \Rightarrow \sqrt{3}m^2 - \sqrt{3} \neq 2m = 0$

1, 20

$\Delta = 9 + 4(3) = 21$

$\frac{-2 \pm \sqrt{21}}{2\sqrt{3}} = \frac{-1 \pm \sqrt{21}}{\sqrt{3}}$

$|\frac{1}{\sqrt{3}} - \frac{1}{\sqrt{3}}| = \frac{2}{\sqrt{3}}$

$m_{BC} = \frac{1-3}{x-3} = 2 \Rightarrow y-3 = 2(x-3) \Rightarrow y = 2x-3$

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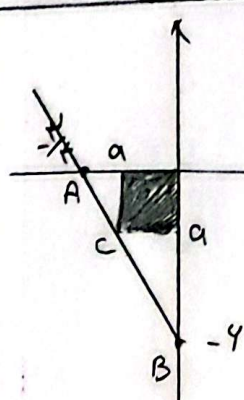
$AB = 1 - \frac{2+3}{\sqrt{1+4}} = \frac{1}{\sqrt{5}} = 2\sqrt{5}$

$AB = y = -2x+3$

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

$|\frac{1-3+2-1}{\sqrt{1+4}}| = \frac{2}{\sqrt{5}} \Rightarrow \frac{2}{\sqrt{5}}$

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$A = \begin{bmatrix} -\frac{3}{2} \\ 0 \end{bmatrix}$
 $B = \begin{bmatrix} 0 \\ -4 \end{bmatrix}$

$a = \frac{0+3}{-\frac{3}{2}-0} = \frac{-3}{-\frac{3}{2}} = \frac{2}{1} = 2$

$y+3 = -1(x-0) \rightarrow y = -x-3$

$\frac{2}{\sqrt{5}} = \frac{2}{\sqrt{5}} \times \frac{2}{2} = \frac{4}{2\sqrt{5}} = \frac{2}{\sqrt{5}}$

$C = \begin{bmatrix} -a \\ -a \end{bmatrix} \rightarrow -a = 1A - 3 \rightarrow -9a = -3 \rightarrow a = \frac{1}{3} = \frac{2}{6}$

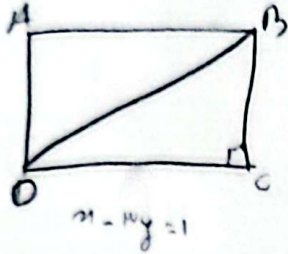
1, 20

$$ay - x = a - 1 \rightarrow y - x = 0 \rightarrow y = x$$

$$y - ax = 1 \rightarrow y - x = 1 \rightarrow y = x + 1$$

$$y - a = 1 \rightarrow a = 1$$

$$\text{المسافة} = \frac{|y-1|}{\sqrt{y}} = \frac{1}{\sqrt{y}} \rightarrow \text{نفسه} = BC$$



$$BC^2 = Bx^2 + C1^2 \Rightarrow \omega^2 = \frac{1}{y} + C1^2 \Rightarrow \sqrt{y\omega - \frac{1}{y}} = C1 = \frac{1}{\sqrt{y}}$$

$$A = (-\frac{1}{y}, a) \text{ و } B = (-\frac{1}{y}, b)$$

$$AB \text{ المسافة} = \sqrt{(\frac{1}{y} - \frac{1}{y})^2 + (b-a)^2} = \frac{1}{y} \text{ صح}$$

$$a = \sqrt{y}$$

$$a = \frac{dy}{dx} = \frac{b-a}{-\frac{1}{y} + \frac{1}{y}} = \sqrt{y} \Rightarrow b - a = \frac{\sqrt{y}}{y}$$

$$\text{المسافة} = \sqrt{y}a = \sqrt{y} \times \frac{1}{y} = \frac{\sqrt{y}}{y}$$

$$\text{المسافة} = a = \frac{x}{y}$$

$$L \text{ المسافة} = -\frac{x}{y}$$

$$L' \text{ المسافة} = \frac{x}{y} = \frac{x'}{y'} \rightarrow \sqrt{x'^2 + y'^2} = \omega \rightarrow x'^2 + y'^2 = y\omega \rightarrow \frac{1}{y}y' + y' = y\omega$$

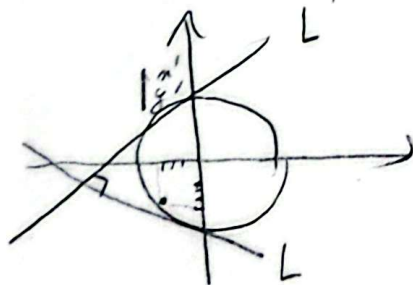
$$x' = -x \rightarrow \frac{y\omega}{y} y' = y\omega$$

$$y' = y \rightarrow \frac{y\omega}{y} y' = y\omega$$

$$\epsilon y = \sqrt{1+y^2} = \omega$$

$$L = \epsilon y + 3x - y\omega$$

$$L' = y y' - \{x - y\omega\} \begin{bmatrix} -y \\ -1 \end{bmatrix} \Rightarrow xy = y$$



$$AH = \frac{y}{\sqrt{1+y^2}}$$

$$\frac{y}{\sqrt{1+y^2}}$$

$$AB^2 = AH^2 + BH^2 \rightarrow y^2 = \left(\frac{y}{\sqrt{1+y^2}}\right)^2 + BH^2 \rightarrow BH = \frac{y}{\sqrt{1+y^2}}$$

$$S = \frac{y}{\sqrt{1+y^2}} \times \frac{y}{\sqrt{1+y^2}} \times \frac{1}{y} = \frac{y}{y}$$