



Mi Universidad

Ejercicios 2

Nombre del Alumno: Hector Elián Alejandro Villarreal

Nombre del tema: Sistemas de Coordenadas

Parcial: 2

Nombre de la Materia: Geometría Analítica

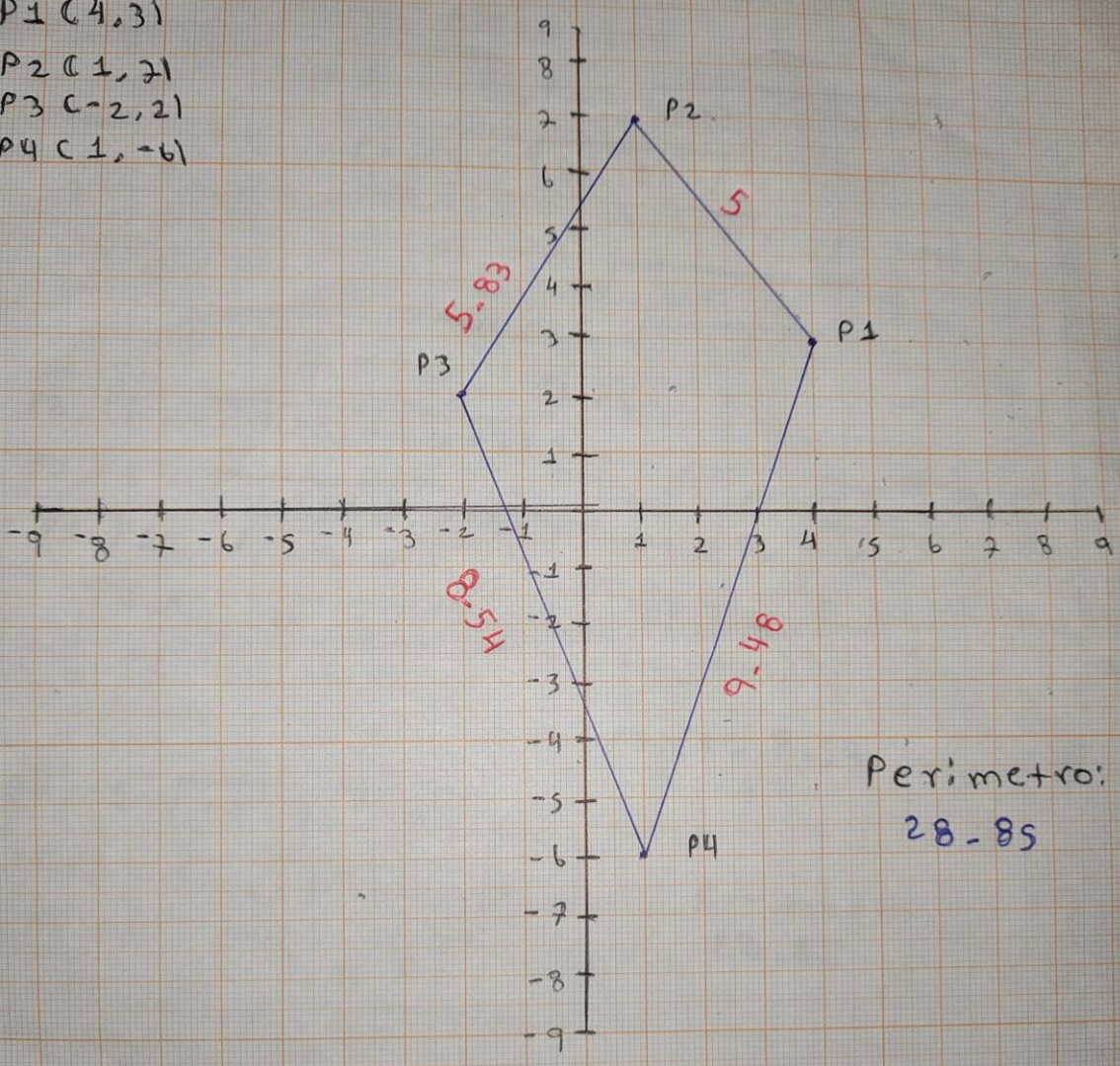
Nombre del profesor: Jorge Enrique Albores Aguilar

Nombre de la Licenciatura: Bachillerato en Recursos Humanos

Cuatrimestre: 3er

Hector Elian Alejandro villa real
Ejercicio 1

- $P_1 (4, 3)$
- $P_2 (1, 7)$
- $P_3 (-2, 2)$
- $P_4 (1, -6)$



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Ejercicio 1

$$P1, P2 = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$P1, P2 = \sqrt{(4-1)^2 + (3-7)^2}$$

$$P2, P3 = \sqrt{(3-1)^2 + (2-7)^2}$$

$$P3, P4 = \sqrt{(1-2)^2 + (-6-2)^2}$$

$$P4, P1 = \sqrt{(4-1)^2 + (-6-3)^2}$$

$$P1, P2 = \sqrt{(4-1)^2 + (3-7)^2}$$

$$P1, P2 = \sqrt{(3)^2 + (-4)^2}$$

$$P1, P2 = \sqrt{9 + 16}$$

$$P1, P2 = \sqrt{25}$$

$$P1, P2 = 5$$

$$P2, P3 = \sqrt{(2-1)^2 + (2-7)^2}$$

$$P2, P3 = \sqrt{(1)^2 + (-5)^2}$$

$$P2, P3 = \sqrt{1 + 25}$$

$$P2, P3 = \sqrt{26}$$

$$P2, P3 = 5.83$$

$$P3, P4 = \sqrt{(1-2)^2 + (-6-2)^2}$$

$$P3, P4 = \sqrt{(-1)^2 + (-8)^2}$$

$$P3, P4 = \sqrt{1 + 64}$$

$$P3, P4 = \sqrt{65}$$

$$P3, P4 = 8.54$$

$$P4, P1 = \sqrt{(4-1)^2 + (-6-3)^2}$$

$$P4, P1 = \sqrt{(3)^2 + (-9)^2}$$

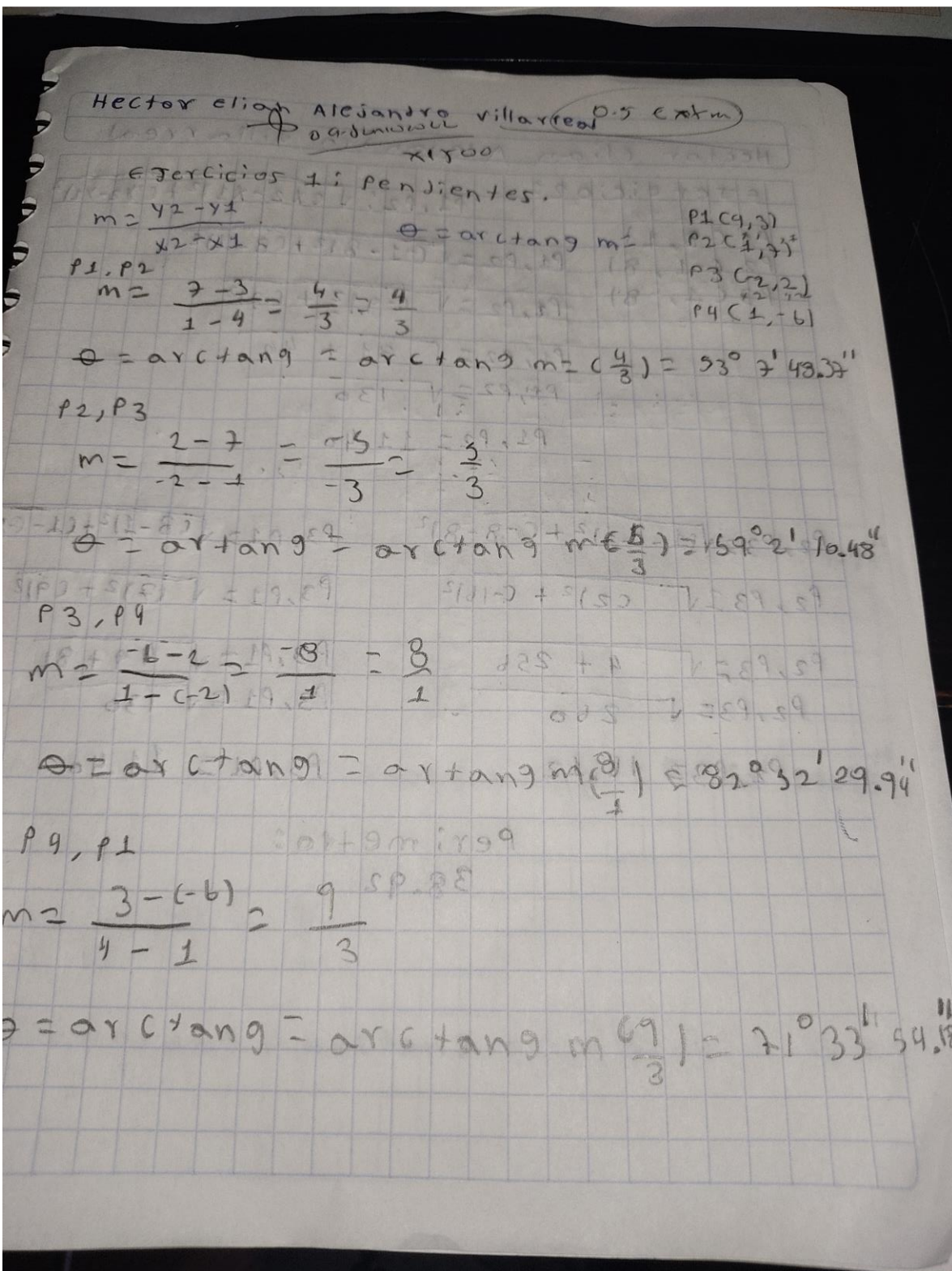
$$P4, P1 = \sqrt{9 + 81}$$

$$P4, P1 = \sqrt{90}$$

$$P4, P1 = 9.48$$

Perimetro

$$28.85$$



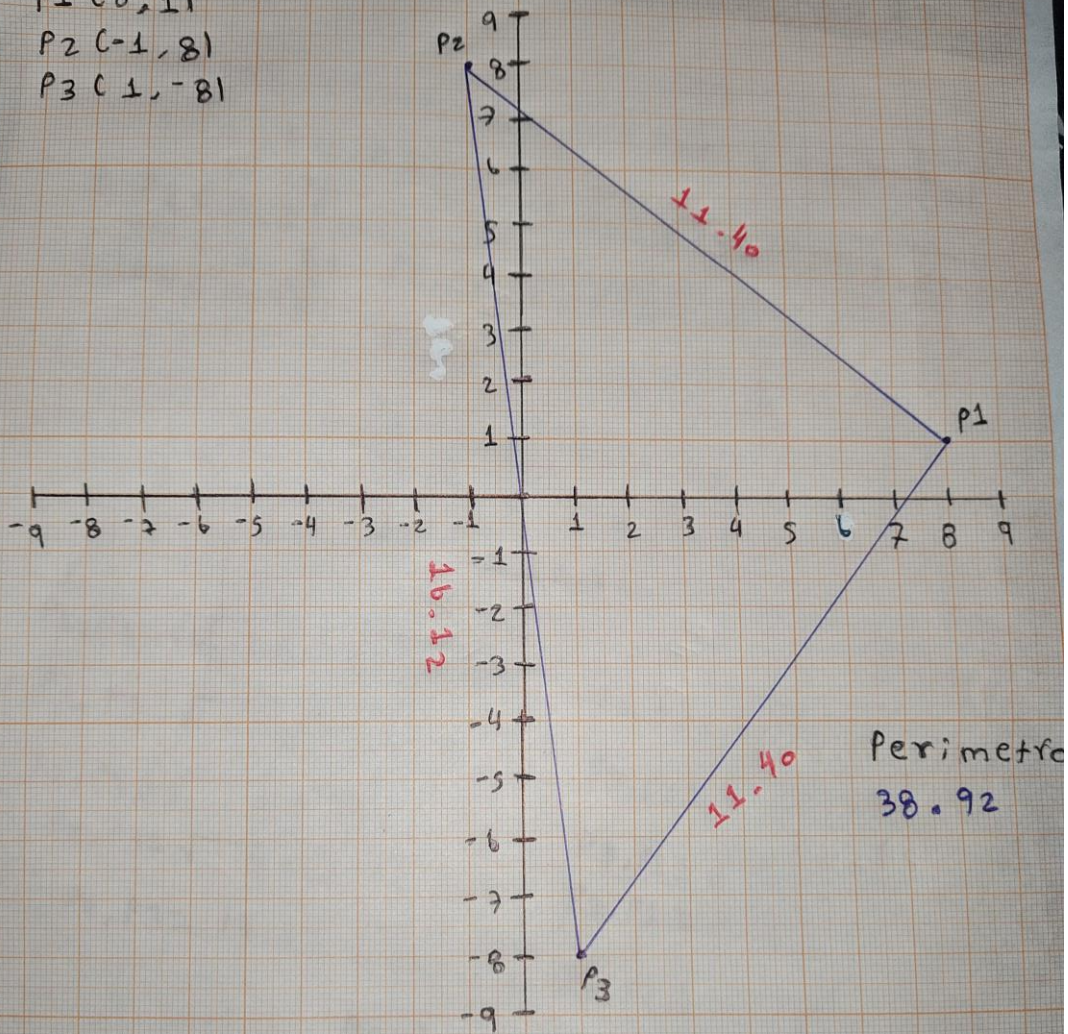
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Ejercicio 2:

$P_1(8, 1)$

$P_2(-1, 8)$

$P_3(1, -8)$



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Ejercicio 2:

$$P1, P2: \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$P1 (8, 1)$$

$$P2 (-1, 8)$$

$$P3 (1, -8)$$

$$P1, P2 = \sqrt{(-1 - 8)^2 + (8 - 1)^2}$$

$$P1, P2 = \sqrt{(-9)^2 + (7)^2}$$

$$P1, P2 = \sqrt{81 + 49}$$

$$P1, P2 = \sqrt{130}$$

$$P1, P2 = 11.40$$

$$P2, P3 = \sqrt{(1 - (-1))^2 + (-8 - 8)^2}$$

$$P3, P1 = \sqrt{(8 - 1)^2 + (1 - (-8))^2}$$

$$P2, P3 = \sqrt{(2)^2 + (-16)^2}$$

$$P3, P1 = \sqrt{(7)^2 + (9)^2}$$

$$P2, P3 = \sqrt{4 + 256}$$

$$P3, P1 = \sqrt{49 + 81}$$

$$P2, P3 = \sqrt{260}$$

$$P3, P1 = \sqrt{130}$$

$$P2, P3 = 16.12$$

$$P3, P1 = 11.40$$

Perimetro:

$$38.92$$

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Ejercicio 2: Pendientes

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\theta = \arctang m =$$

$$P_1(8, 1)$$

$$P_2(-1, 8)$$

$$P_3(1, -8)$$

$P_1, P_2:$

$$m = \frac{8 - 1}{-1 - 8} = \frac{7}{-9} = -\frac{7}{9}$$

$$\theta = \arctang = \arctang m = \left(\frac{7}{9}\right) = 37^\circ 52' 29.94''$$

$P_2, P_3:$

$$m = \frac{-8 - 8}{1 - (-1)} = \frac{-16}{2} = -\frac{16}{2}$$

$$\theta = \arctang = \arctang m = \left(\frac{16}{2}\right) = 82^\circ 52' 29.94''$$

$P_3, P_1:$

$$m = \frac{1 - (-8)}{8 - 1} = \frac{9}{7}$$

$$\theta = \arctang = \arctang m = \left(\frac{9}{7}\right) = 52^\circ 7' 30.06''$$