

1. Ecuaciones Lineales

$$3x + 2y = 1$$

$$x - 5y = 6 \Rightarrow x = 6 + 5y$$

$$3(6 + 5y) + 2y = 1$$

$$18 + 15 + 2y = 1 \Rightarrow 18 + 17y = 1$$

$$\Rightarrow y = \frac{1 - 18}{17} = \underline{y = -1 //}$$

$$x - 5(-1) = 6$$

$$x = 6 - 5$$

$$\underline{x = 1 //}$$

2. $x + y = 7$

$$5x - 2y = -7$$

$$\left(\frac{-7 + 2y}{5}\right) + y = 7$$

$$5x - 2y = -7$$

$$x = \frac{-7 + 2y}{5}$$

$$\left(\frac{-7 + 2y}{5}\right) \cdot 5 + y \cdot 5 = 7 \cdot 5$$

$$-7 + 2y + 5y = 35$$

$$-7 + 7y = 35$$

$$y = \frac{35 + 7}{7} = \underline{y = 6 //}$$

$$x + 6 = 7$$

$$x = 7 - 6$$

$$\underline{x = 1 //}$$

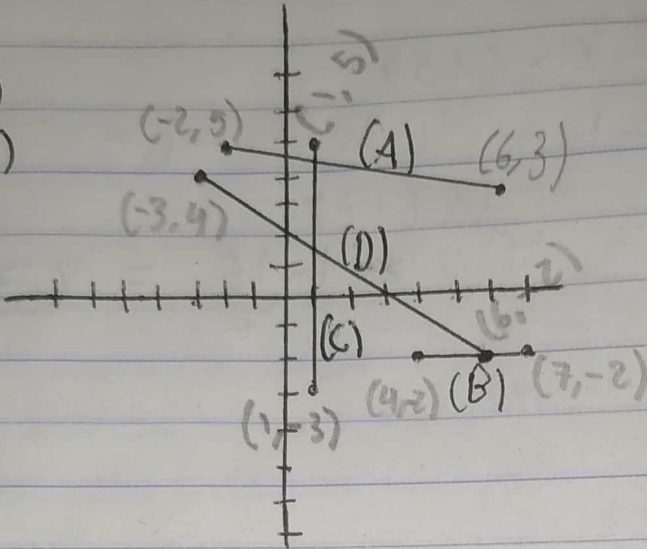
3. Rectas en el plano

$$A = (6, 3), (-2, 5)$$

$$B = (7, -2), (4, -2)$$

$$C = (1, -3), (1, 5)$$

$$D = (-3, 4) \text{ y } (6, -2)$$

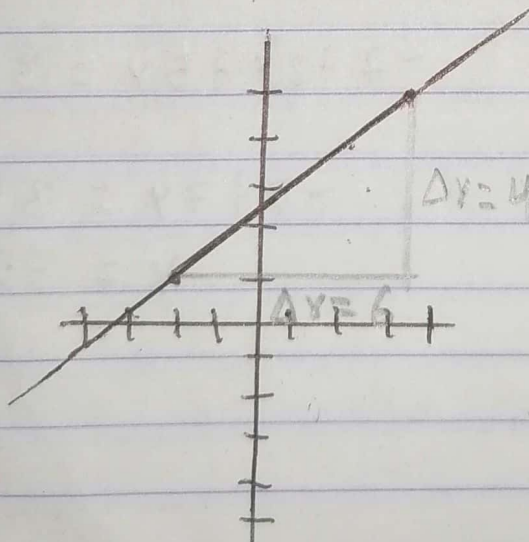


4. Localice la pendiente de los puntos $A(-2, 1)$ y $B(4, 5)$

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

$$m = \frac{5 - 1}{4 - (-2)} = \frac{4}{6}$$

$$m = 0.667 //$$



Ecuación Cuadrática

5. Resuelva la ecuación cuadrática $2x^2 + 9x + 10 = 0$, utilizando la fórmula general.

$$x = \frac{-9 \pm \sqrt{9^2 - 4(2)(10)}}{2(2)}$$

$$x = \frac{-9 \pm \sqrt{81 - 80}}{4}$$

$$x = \frac{-9 \pm \sqrt{1}}{4}$$

$$x = \frac{-9 \pm 1}{4} = x_1 \frac{-9 + 1}{4}$$

$$x_2 = \frac{-9 - 1}{4}$$

$$x_1 = \frac{-8}{4}$$

$$x_2 = \frac{-10}{4}$$

$$x_1 = -2 //$$

$$x_2 = \frac{-5}{2} //$$

Suma de Polinomios.

$$6. (x^4 - 3x^2 + x + 1) + (x^3 - x^2 + 5x + 2)$$

$$= \underline{x^4 + x^3 - 4x^2 + 6x + 3 //}$$

$$7. (-2k^3 - 7k^2 + 5k + 6k^2 + 3k)$$

$$= \underline{-2k^3 + k^2 + 8k //}$$