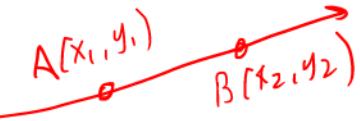


ANALİTİK GEOMETRİ

①



$$|AB| = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$$② m_{AB} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$③ y = mx + n \rightarrow \text{Eğim} = m$$

$$ax + by + c = 0 \rightarrow m = -\frac{a}{b}$$

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

$$\rightarrow 5x - 3y + 4 = 0 \rightarrow m = \frac{-5}{3}$$

$$④ d_1 // d_2 \rightarrow m_1 = m_2$$

$$d_1 \perp d_2 \rightarrow m_1 \cdot m_2 = -1$$

$$\begin{array}{c} 5 \\ \downarrow \\ -1/5 \end{array} \quad \begin{array}{c} \text{Tersinin} \\ \text{Ters} \\ \text{isaretli} \end{array}$$

$$\begin{array}{c} -2/3 \\ \downarrow \\ +3/2 \end{array}$$

$$7x - 14 = 3y - 3$$

$$7x - 3y - 11 = 0$$

⑤ Düzleme Denklemi Yazma

① Geçtiği bir nokta ve eğimi bilinen düzleme denklem:

$$A(x_0, y_0)$$

$$y - y_0 = m(x - x_0)$$

$$A(2, 3)$$

$$y - 3 = 5(x - 2)$$

$$y = 5x - 7$$

② Geçtiği iki noktası bilinen düzleme denklemi:

$$A(x_1, y_1) \quad B(x_2, y_2)$$

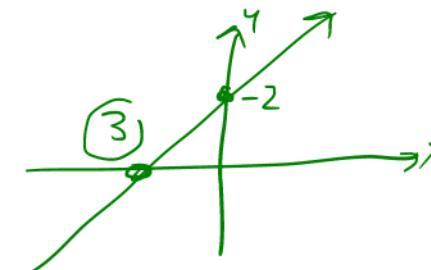
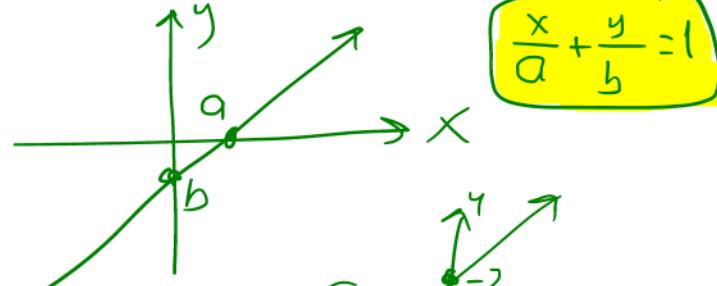
$$\frac{x - x_1}{x_2 - x_1} = \frac{y - y_1}{y_2 - y_1}$$

$$\begin{array}{c} \text{Örnek} \\ A(2, 1) \\ B(5, 8) \end{array}$$

$$\frac{x - 2}{5 - 2} = \frac{y - 1}{8 - 1}$$

$$\frac{x - 2}{3} = \frac{y - 1}{7}$$

III Eleşenleri kestigi noktaları bilinen düzlemin denklemi:



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

$$\frac{2x - 3y}{6} = 1$$

$$2x - 3y - 6 = 0$$

6

$m = \text{tend}$

$m > 0$

$m < 0$

