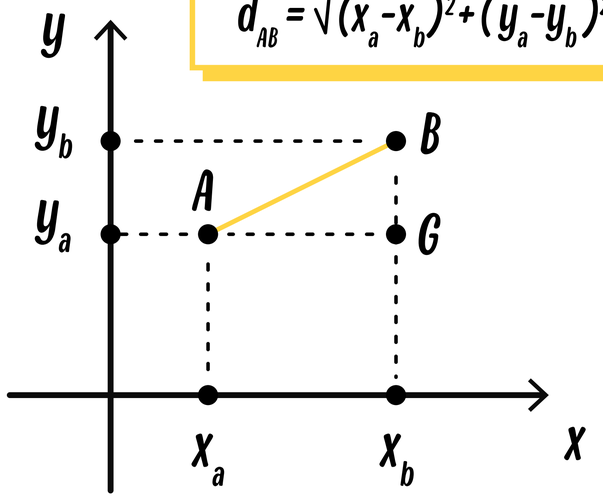
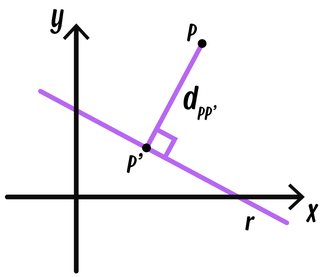
PONTO

$$d_{AB} = \sqrt{(x_a - x_b)^2 + (y_a - y_b)^2}$$



DISTÂNCIA

ENTRE UM PONTO E UMA RETA



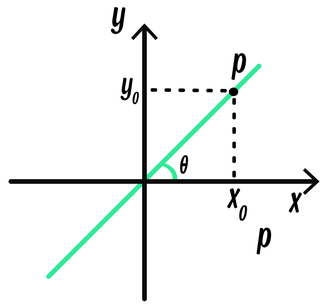
$$d = \frac{|ax_0 + by_0 + c|}{\sqrt{a^2 + b^2}}$$

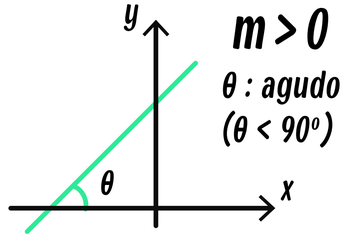
RETAS

$$m = tg\theta$$

EQUAÇÃO FUNDAMENTAL

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

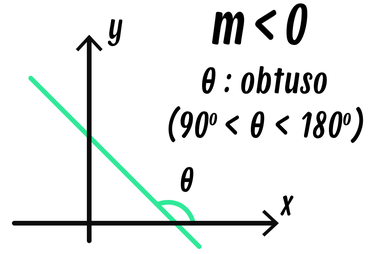




m > 0

θ : agudo

(θ < 90°)

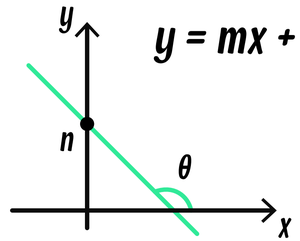


m < 0

θ : obtuso

(90° < θ < 180°)

EQUAÇÃO REDUZIDA



$$y = mx + n$$

EQUAÇÃO GERAL

$$ax + by + c = 0$$

Ex: $y = -2x + 3$

$2x + y - 3 = 0$

GEOMETRIA ANALÍTICA

descomplica

ENTRE RETAS PARALELAS

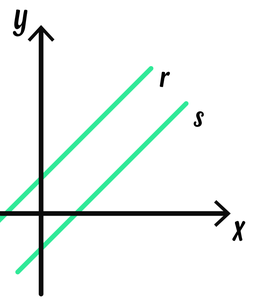
calcular a distância
entre o ponto de uma reta
e a outra reta

RELAÇÃO ENTRE OS COEFICIENTES

retas paralelas

$r // s$

$m_r = m_s$



retas perpendiculares

$r \perp s$

$m_r \cdot m_s = -1$