$Ax+By+C=0$

$Ax+C=0$

$\frac{x}{c}+\frac{y}{b}=1$


$Ax+By+C=0$

$x\cos\alpha+y\cos\beta=p$

$\cos(90°-\alpha)$

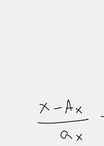

$x\cos\alpha+y\sin\alpha=p$

$\frac{A}{\sqrt{A^2+B^2}}x+\frac{B}{\sqrt{A^2+B^2}}y=\frac{-C}{\sqrt{A^2+B^2}}$



$A+t\vec{a}$

$\vec{a}$




$\begin{cases} x=A_x+a_x t \\ y=A_y+a_y t \end{cases}$ $\quad \vec{a}=(a_x,a_y)$

$t=0$, $(A_x,A_y)$

$t=1$ $(A_x+a_x, A_y+a_y)$

$\frac{x-A_x}{a_x}=\frac{y-A_y}{a_y}$

$(2,1)$, $(1,1)$

$\frac{x-2}{1}=\frac{y-1}{1} \Rightarrow x-y-1=0$

$A(1,18)$, $B(3,5)$


$\overrightarrow{AB}=(2,-13)$

$\frac{x-1}{2}=\frac{y-18}{-13}$

$(x_0,y_0)$, $(x_1,y_1)$

$(x_1-x_0, y_1-y_0)$

$\frac{x-x_0}{x_1-x_0}=\frac{y-y_0}{y_1-y_0}$

$y_1=y_0$

$y=y_0=y_1$

$2x+y+5=0$

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


$(0,-5)$, $(-5/2,0)$

$\frac{x-0}{-5/2-0}=\frac{y-(-5)}{0-(-5)}$

$\frac{x-0}{-5/2}=\frac{y+5}{5}$


$Ax+By=0$ $\quad (\vec{a},\vec{b})$

$(\vec{A},\vec{B})$ $\quad (x,y)=$ $\quad \vec{a}\ \vec{b}$

$=Ax+By=0$


$Ax+By+C=0$

$\vec{n}=(A,B)$

$A_1x+B_1y+C_1=0$ $\quad (\vec{A_1},\vec{B_1})$

$A_2x+B_2y+C_2=0$ $\quad (\vec{A_2},\vec{B_2})$

$\cos\varphi=\frac{(\ ,\ )}{|\ |\ |\ |}$

$3x+2y+5=0$ $\quad (3,2)$ $\quad \sqrt{3^2+2^2}=\sqrt{13}$

$7x-y-1=0$ $\quad (7,-1)$ $\quad \sqrt{7^2+1^2}=\sqrt{50}$

$21-2=19$

$\cos\varphi=\frac{19}{\sqrt{13}\sqrt{50}}$

$n_1=(\vec{A_1},\vec{B_1})$

$n_2=(\vec{A_2},\vec{B_2})$

$\frac{A_1}{A_2}?\frac{B_1}{B_2}$

$Ax+By+C=0$

$\vec{n}=(A,B)$

$\vec{p}=(B,-A)$

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$Ax+By+Cz+D=0$

$\frac{x}{a}+\frac{y}{b}+\frac{z}{c}=1$


$\overrightarrow{M_1M}=\vec{r}-\vec{r}_1=t\vec{a}+s\vec{b}$

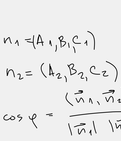
$\vec{r}=\vec{r}_1+t\vec{a}+s\vec{b}$

векторное параметрическое ур-ние пл-ти

$x\cos\alpha+y\cos\beta+z\cos\gamma=p$

$\cos^2\alpha+\cos^2\beta+\cos^2\gamma=1$

$\begin{cases} x=x_0+a_x t+b_x s \\ y=y_0+a_y t+b_y s \\ z=z_0+a_z t+b_z s \end{cases}$



$Ax+By+Cz+D=0$

$n=(A,B,C)$

$A_1x+$

$A_2x+$

$n_1=(A_1,B_1,C_1)$

$n_2=(A_2,B_2,C_2)$

$\cos\varphi=\frac{(\vec{n_1},\vec{n_2})}{|\vec{n_1}|\,|\vec{n_2}|}$