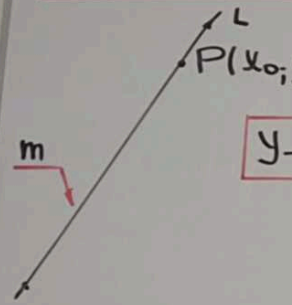
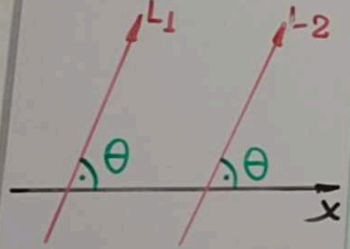
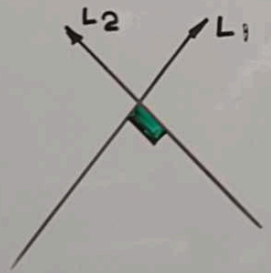
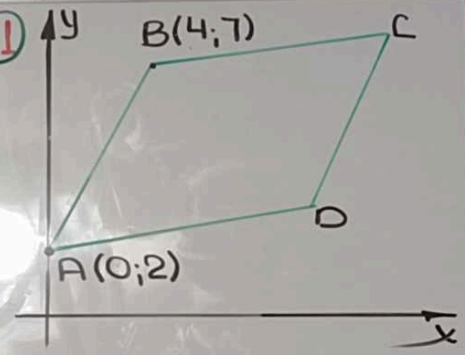
ECUACIÓN PUNTO - PENDIENTE



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

RECTAS PARALELAS	RECTAS PERPENDICULARES
	
$m_1 = m_2$	$m_1 \cdot m_2 = -1$

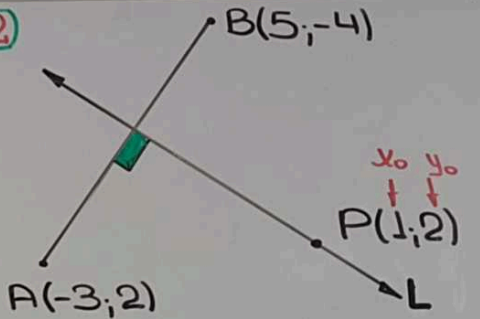
11



$$m_{\overline{CD}} = m_{\overline{AB}} = \frac{7-2}{4-0}$$

$$\therefore m_{\overline{CD}} = \frac{5}{4}$$

12



$$\cdot\ m_{\overline{AB}} = \frac{-4-2}{5+3} \rightarrow m_{\overline{AB}} = -\frac{3}{4}$$

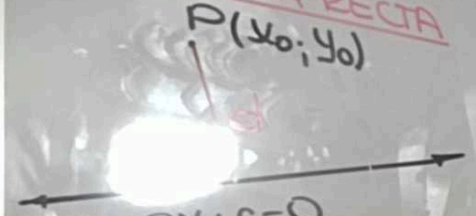
$$\rightarrow m_L = \frac{4}{3}$$

2- $y - 2 = \frac{4}{3}(x-1)$

$3y - 6 = 4x - 4$

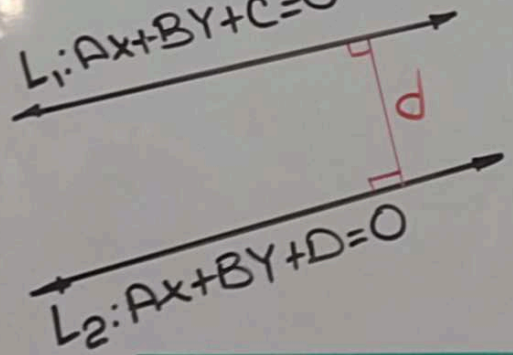
$4x - 3y + 2 = 0$

DISTANCIA DE UN PUNTO A UNA RECTA

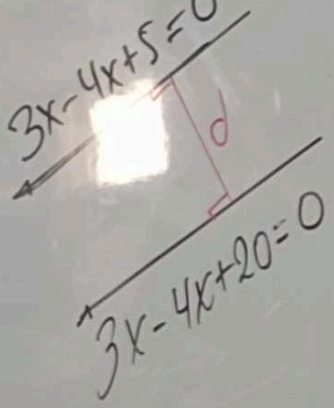


$$d = \frac{|Ax_0 + By_0 + C|}{\sqrt{A^2 + B^2}}$$

DISTANCIA ENTRE RECTAS PARALELAS

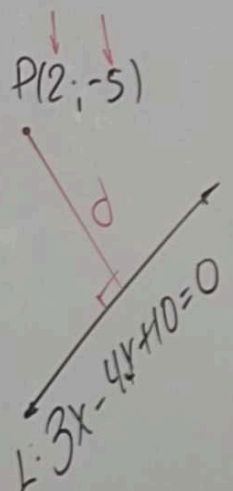


$$d = \frac{|C - D|}{\sqrt{A^2 + B^2}}$$



$$d = \frac{|5 - 20|}{\sqrt{3^2 + (-4)^2}} = \frac{15}{5}$$

$$d = 3$$



$$d = \frac{|3(2) - 4(-5) + 10|}{\sqrt{(3)^2 + (-4)^2}} = \frac{36}{5}$$

$$d = \frac{36}{5}$$

$\therefore m_{CD} = \frac{1}{4}$

0

$(x-3)^2 + (y+5)^2 = 25$

$x-3 = 0$ $\quad y+5 = 0$ $\quad 25 = R^2$

$C(3; -5)$

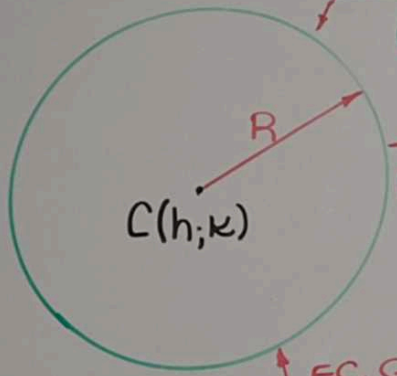
$R = 5$

2

CIRCUNFERENCIA

EC. CANÓNICA C(0;0)

$x^2 + y^2 = R^2$



EC. ORDINARIA

$(x-h)^2 + (y-k)^2 = R^2$

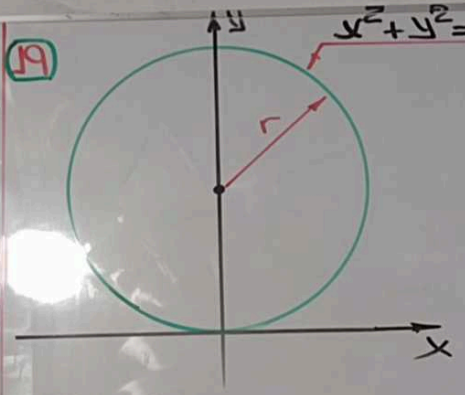
EC. GENERAL

$x^2 + y^2 + Cx + Dy + E = 0$

NOTA:

$h = -\frac{C}{2}$	$k = -\frac{D}{2}$
$R = \sqrt{h^2 + k^2 - E}$	

1º $x^2 + y^2 = 4y$



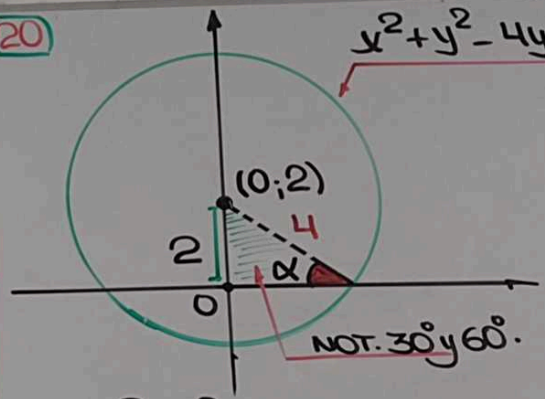
$\mathcal{C}: x^2 + y^2 - 4y + 4 = 0 + 4$

$x^2 + (y-2)^2 = 4$

R_2

$\rightarrow R = 2$

2º $x^2 + y^2 - 4y - 12 = 0$



$\mathcal{C}: x^2 + y^2 - 4y + 4 - 12 = 0 + 4$

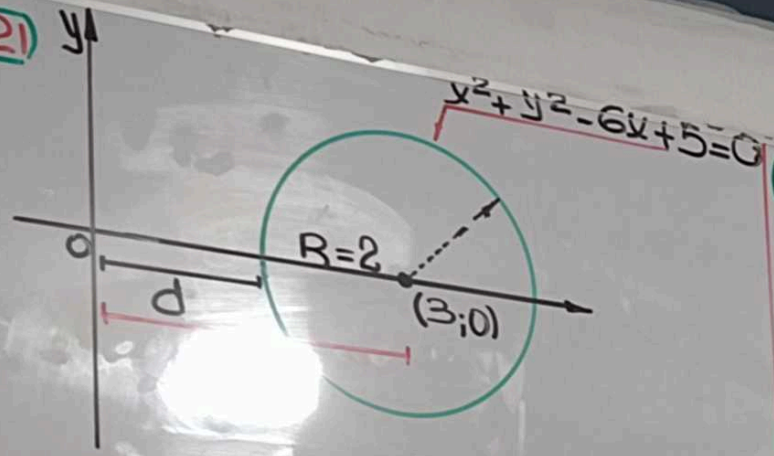
$x^2 + (y-2)^2 = 16$

$C(0;2)\ ;\ R = 4$

$\therefore \alpha = 30°$

-12=0

(21)



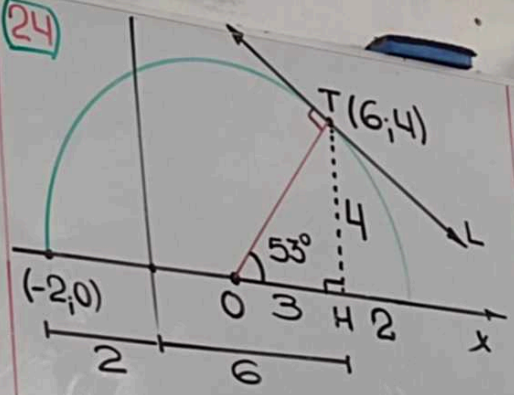
C: $x^2+y^2-6x+9+5=0+9$

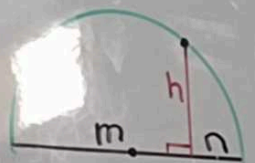
$(x-3)^2+y^2=4$

C(3;0) ; R=2

$\therefore d=1$

(24)





$h^2=m.n$

$m_{\overline{QT}}=\tan 53°$

$m_{\overline{QT}}=\frac{4}{3}$

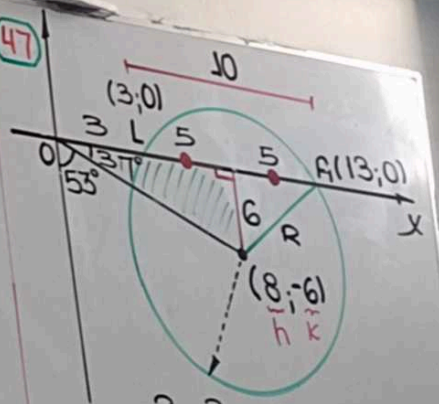
$m_L=-\frac{3}{4}$

$y-4=-\frac{3}{4}(x-6)$

$4y-16=-3x+18$

$3x+4y-34=0$

(47)



$R^2=6^2+5^2$

$R^2=61$

$(x-h)^2+(y-k)^2=R^2$

$(x-8)^2+(y+6)^2=61$