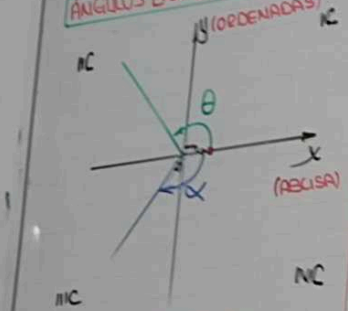
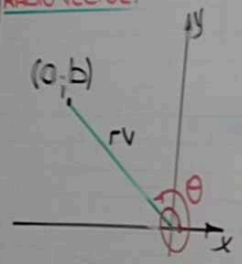
ÁNGULOS EN POSICIÓN NORMAL



θ ∈ IIC ∨ θ ∈ IIIC

RADIO VECTOR:



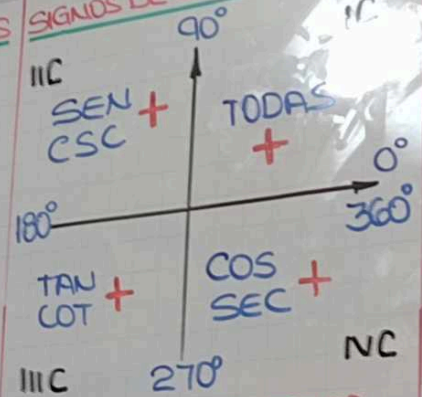
$rv^2 = a^2 + b^2$

RAZONES TRIGONOMÉTRICAS

a: ABCISA
b: ORDENADA
rv: RADIO VECTOR

$\text{SEN}\theta = \frac{b}{rv}$	$\text{CSC}\theta = \frac{rv}{b}$
$\cos\theta = \frac{a}{rv}$	$\text{SEC}\theta = \frac{rv}{a}$
$\text{TAN}\theta = \frac{b}{a}$	$\text{COT}\theta = \frac{a}{b}$

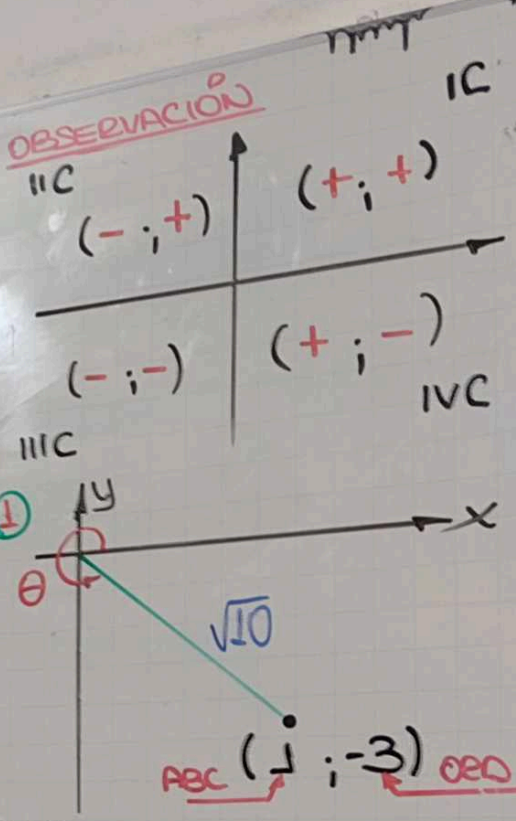
SIGNOS DE LAS RAZ. TRIG.



ÁNGULOS CUADRANTALES

RT ∢	0°	90°	180°	270°	360°
SEN	0	1	0	-1	0
COS	1	0	-1	0	1
TAN	0	ND	0	ND	0
COT	ND	0	ND	0	ND
SEC	1	ND	-1	ND	1
CSC	ND	1	ND	-1	ND

OBSERVACIÓN



PIDEN:

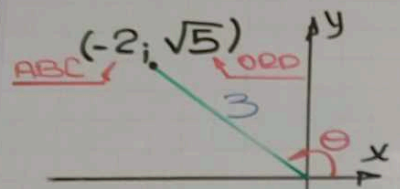
$E = \sqrt{10}\,\text{SEN}\theta - 12\,\text{COT}\theta$

$E = \sqrt{10}\left(\frac{-3}{\sqrt{10}}\right) - 12\left(\frac{1}{-3}\right)$

$E = -3 + 4$

$E = 1$

(2) $P(-2;\sqrt{5}) \in IIC$

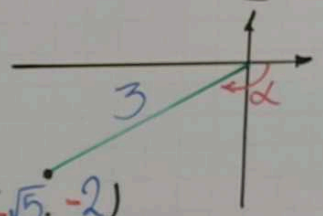


PIDEN:

$\cos\theta = -\frac{2}{3}$

(3) $\alpha \in IIIC$

$\text{SEN}\alpha = -\frac{2}{3}$ ← ORD, ← RV



$(-\sqrt{5}; -2)$

ABC, ORD

$E = \sqrt{5}(\text{TAN}\alpha + \text{SEC}\alpha)$

$= \sqrt{5}\left(\frac{+2}{+\sqrt{5}} + \frac{3}{-\sqrt{5}}\right)$

$2 - 3 = -1$

(4) I. $\text{SEN}200^\circ \cdot \text{TAN}240^\circ$ → IIIC, → IIIC

$(-)\cdot(+) = (-)$

II. $\cos 120^\circ \cdot \text{TAN}100^\circ$ → IIC, → IIC

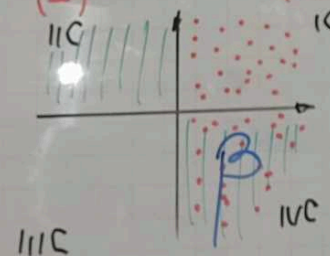
$(-)\cdot(-) = (+)$

III. $\text{SEN}150^\circ \cdot \cos 340^\circ$ → IIC, → IVC

$(+)\cdot(+) = (+)$

(5) $\text{TAN}\beta < 0$ y $\cos\beta > 0$

(−) (+)



$\therefore \beta \in IVC$

(7) $E = \frac{(a+b)^2 \overset{1}{\text{SEC}360^\circ} + (a-b)^2 \overset{-1}{\cos 180^\circ}}{2ab \underset{-1}{\text{CSC}270^\circ}}$

$E = \frac{(a+b)^2 - (a-b)^2}{-2ab}$

$E = \frac{4ab}{-2ab}$

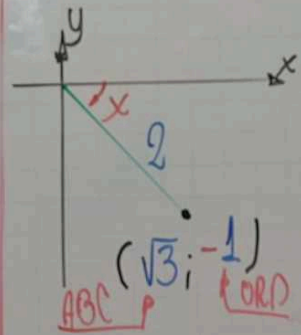
$\therefore E = -2$

(8) $x \in IVC$; $|\text{CSC}x| = 4\,\text{SEN}\frac{\pi}{6}$

(−)

$-\text{CSC}x = 4\left(\frac{1}{2}\right)^2$

$\text{CSC}x = -\frac{2}{1}$ ← RV, ← ORD



PIDEN

$\text{SEN}x + \sqrt{3}\cos x$

$\frac{-1}{2} + \sqrt{3}\left(\frac{\sqrt{3}}{2}\right)$

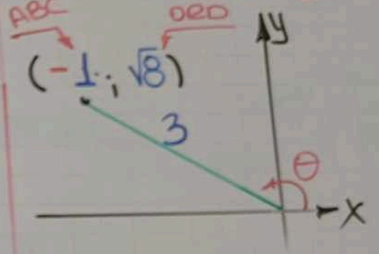
$-\frac{1}{2} + \frac{3}{2} = 1$

(9) $|\cos\theta| = 0{,}\overline{3}$; $\theta \in IIC$

(−)

$-\cos\theta = \frac{3}{9}$

$\cos\theta = -\frac{1}{3}$ ← ABC, ← RV



PIDEN:

$\text{TAN}^2\theta + \text{SEC}\theta$

$\left(\frac{\sqrt{8}}{-1}\right)^2 + \frac{3}{-1}$

$8 - 3$

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