Razones Trigonometricas de angulos en cualquier magnitud

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Si: $8^{\tan\theta + 1} = 4$

Además: $\cos\theta > 0$, calcula: $\operatorname{sen}\theta$

$$2^{3(\tan\theta + 1)} = 2^2$$

$$3(\tan\theta + 1) = 2$$

$$\tan\theta + 1 = \frac{2}{3}$$

$$\tan\theta = \frac{-1}{3}$$

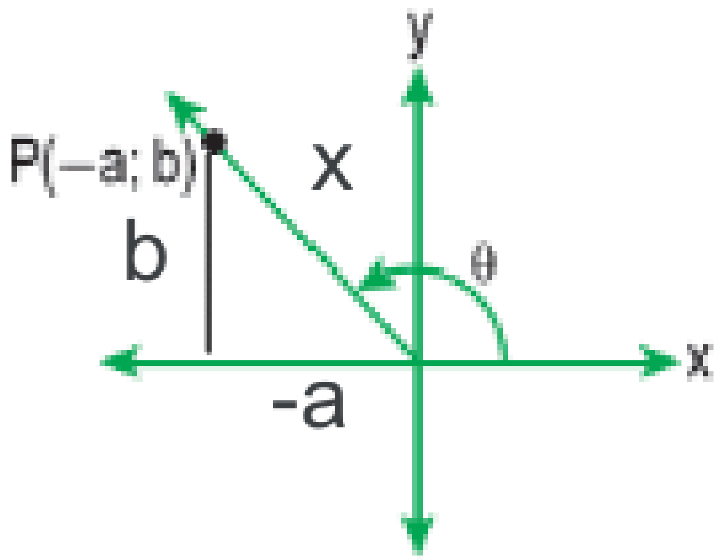
$$H^2 = -1^2 + 3^2$$

$$H = \sqrt{8}$$

$$\boxed{\frac{-1}{\sqrt{8}} = \operatorname{sen}\theta}$$

Dado el gráfico, halla:

$$A = \sqrt{\sqrt{a^2+b^2}\cos\theta.\cot\theta.b}$$



$$\sqrt{\cancel{\sqrt{a^2+b^2}}\cdot -\left(\frac{-a}{\cancel{\sqrt{a^2+b^2}}}\right)\cdot -\left(\frac{-a}{\cancel{b}}\right)\cancel{b}}$$

$$\sqrt{a.a}$$

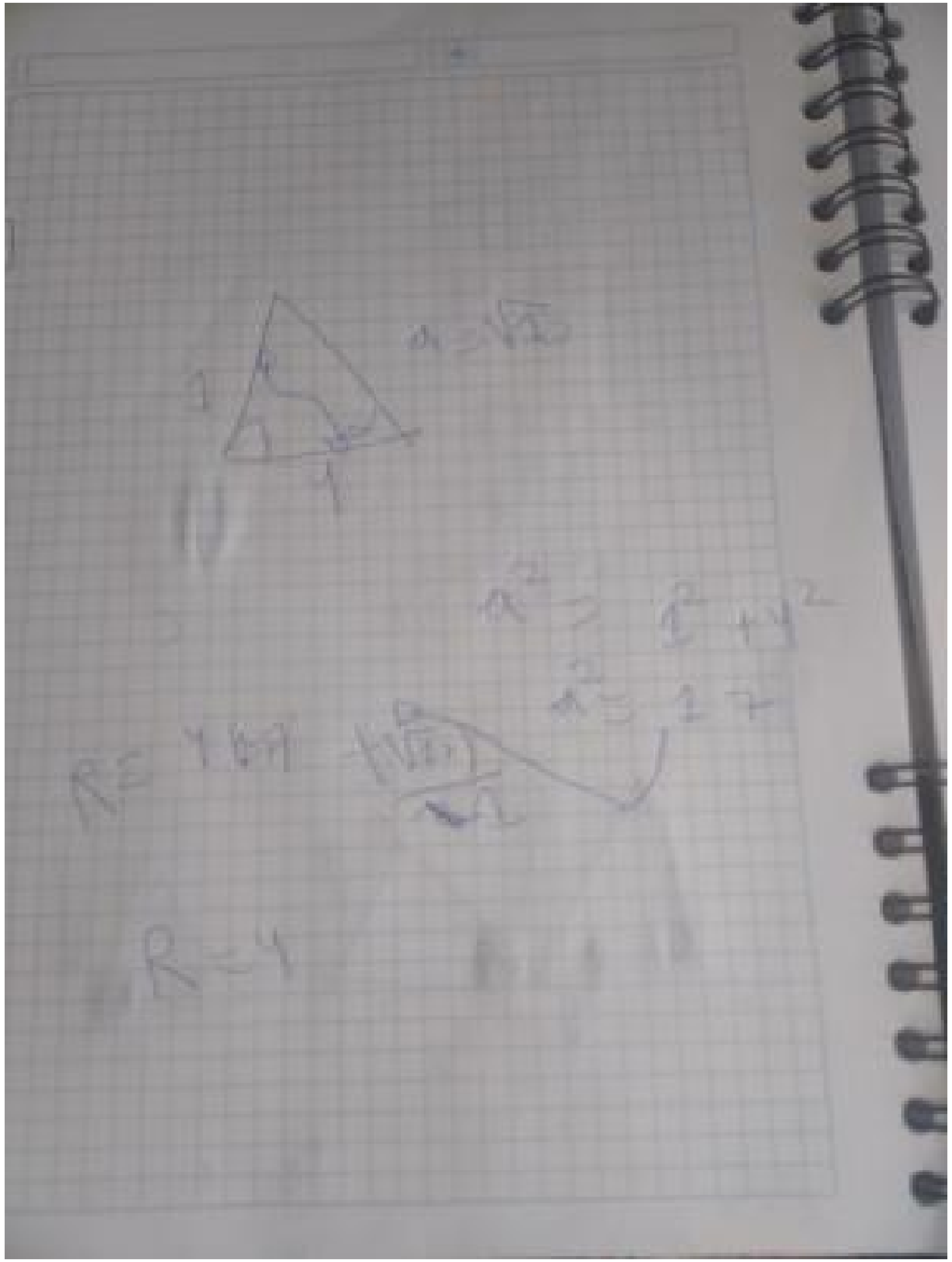
$$a$$

$$x^2=(-a)^2+b^2$$

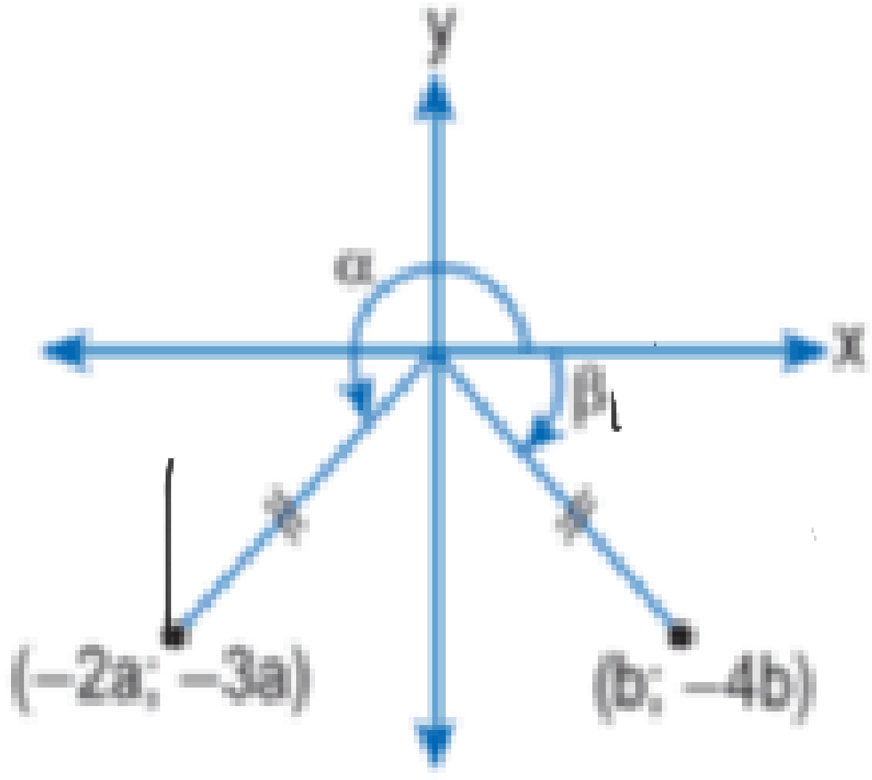
$$x=\sqrt{a^2+b^2}$$

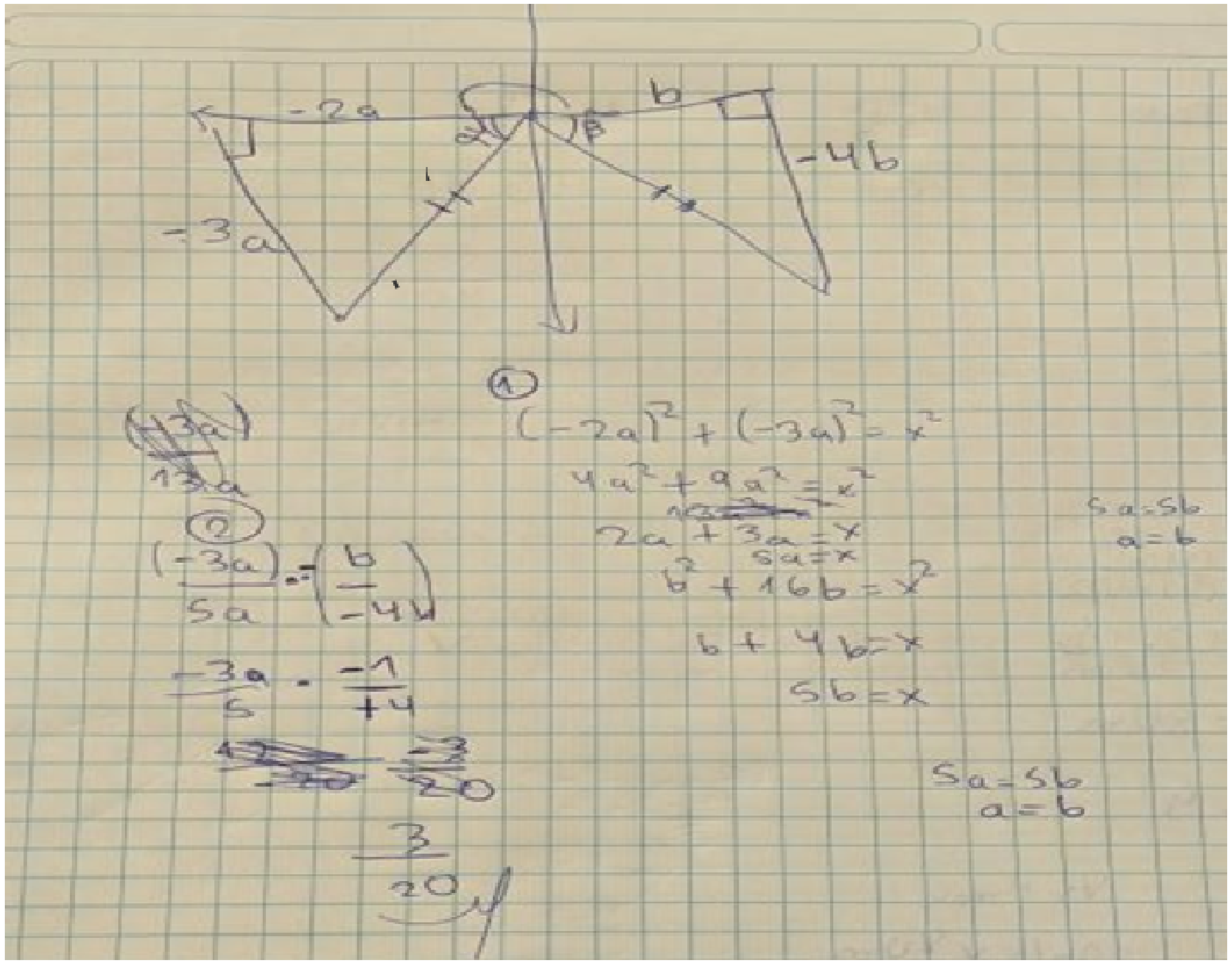
Si: $\tan^2\theta = \dfrac{1}{4} \wedge \theta \in \,]270°; 360°[$

Calcula: $R = 2\sec\theta + \csc\theta$



De la figura, calcula: $\tan\alpha \cot\beta$





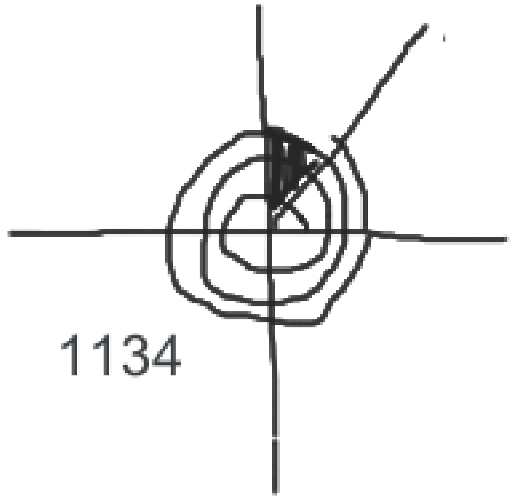
Coloca (V) verdadero o (F) falso según corresponda. Luego marca la alternativa correcta.

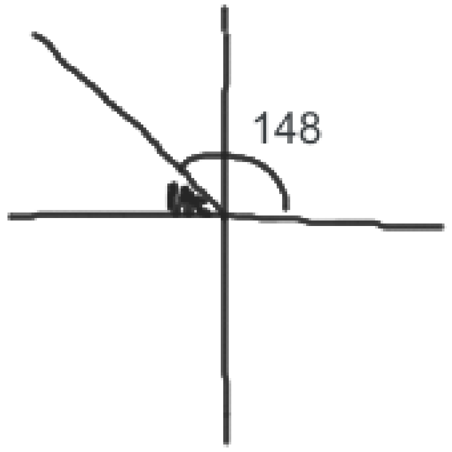
I. $\text{sen}1134° \cdot \cos 148° < 0$ (V)
II. $\tan 576° \cdot \sec 220° > 0$ (F)
III. $2\text{sen}90° + 2\sec 180° = 0$ (V)
IV. $3\text{sen}270° + 4\sec 360° < 0$ (F)

III. $2.1 + 2.-1=0$
$2+-2=0$
$0=0$

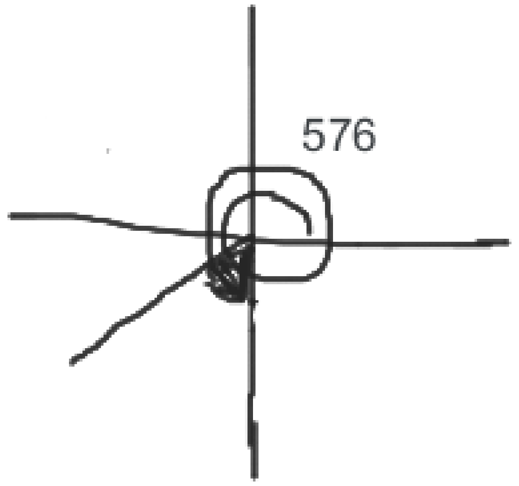
IV. $3.-1 + 4.1<0$
$-3 + 4<0$
$1<0$

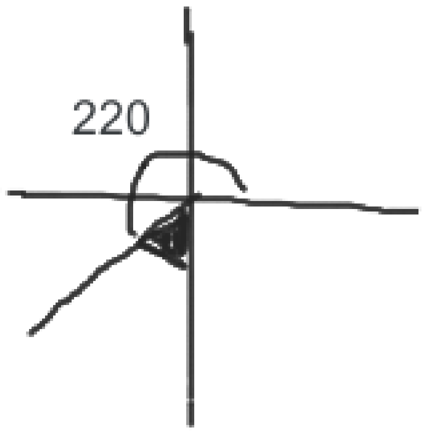
I.



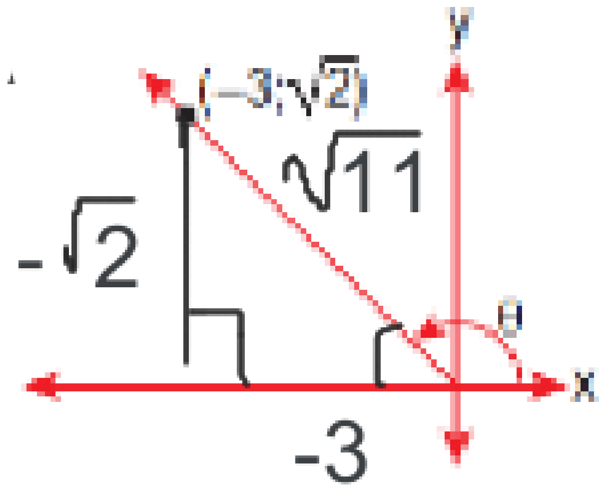


II.





De acuerdo al gráfico, calcula cosθ.

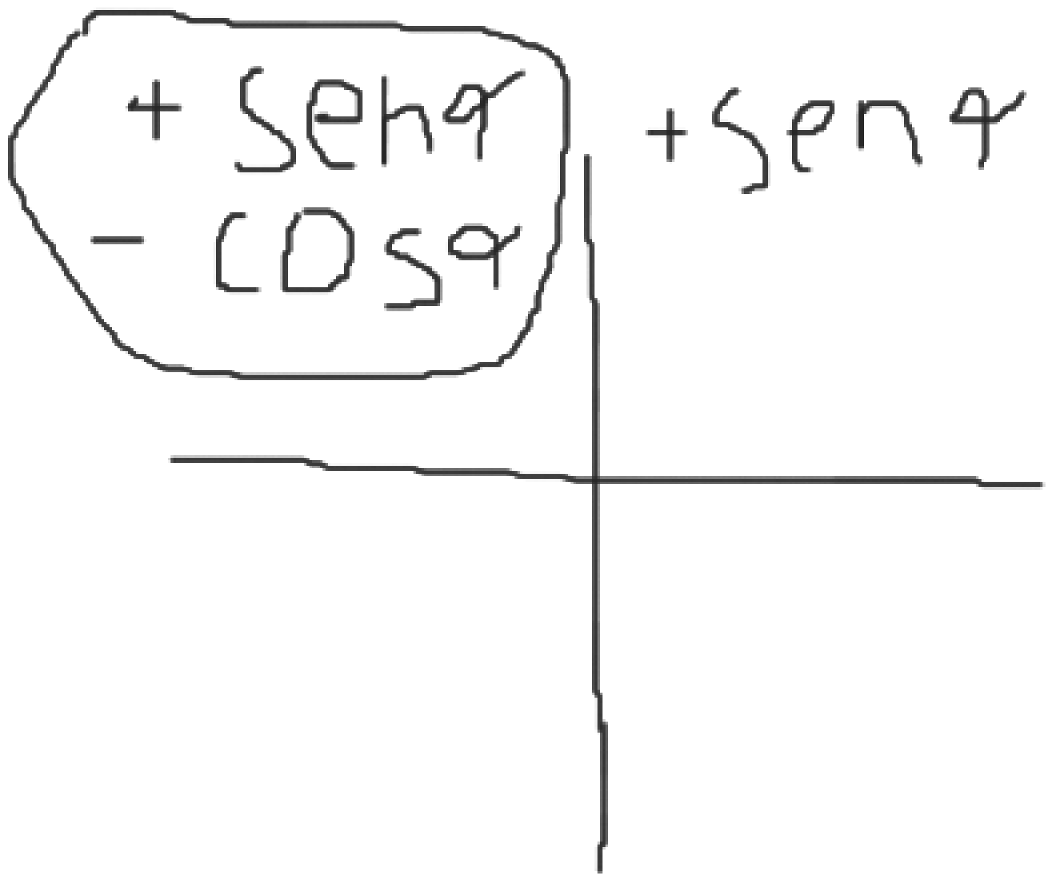


$$-\frac{CA}{H} = -\frac{-3}{\sqrt{11}} \times \frac{\sqrt{11}}{\sqrt{11}} = \frac{3\sqrt{11}}{11}$$

Si: sen$\alpha > 0$; cos$\alpha < 0$, determina el signo de la expresión:

$P = (\tan\alpha + \cot\alpha)\ \text{sen}\alpha$

A) + B) – C) + o – D) + y – E) FD

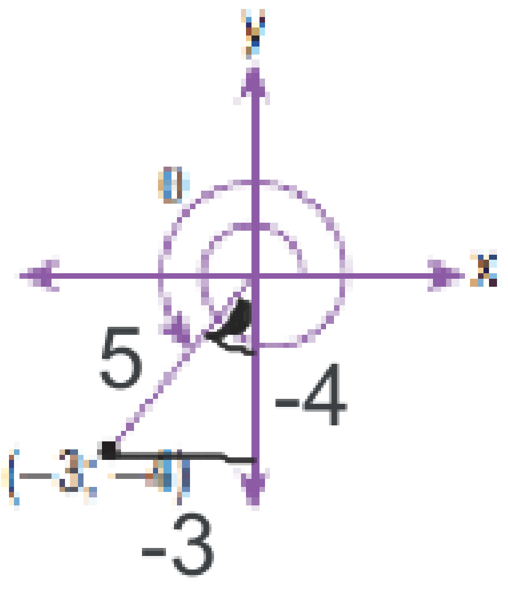


(-tanα+ -cotα). senα

-(tanα+ cotα).sen

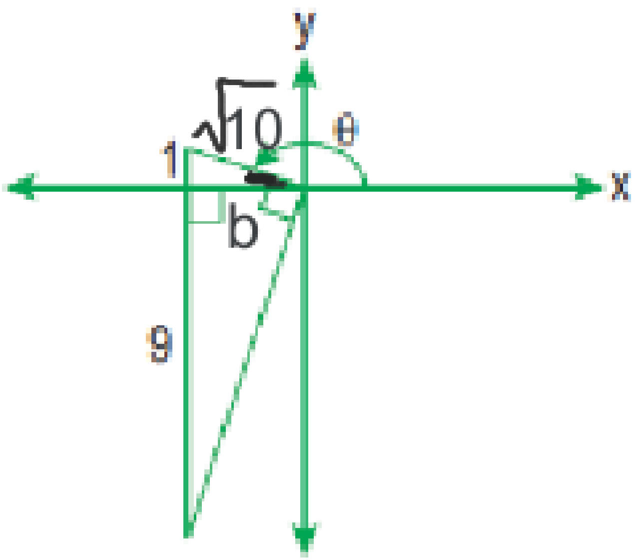
-

Del gráfico, calcula: 1 – senθ



$$1 - \left(\frac{CA}{H}\right) = 1 + \left(\frac{-4}{5}\right) = \frac{1}{5}$$

De la figura, calcula: senθ



$$\frac{CO}{H} = \frac{1}{\sqrt{10}} \cdot \frac{\sqrt{10}}{\sqrt{10}} = \frac{\sqrt{10}}{10}$$

$b^2 = 1.9$

$b^2 = 9$

$b = \pm 3$

$b = -3$