NOMBRE Y APELLIDOS

Si el lado final de un ángulo θ pasa por el punto $(-1; 2)$, calcula $J = (\text{sen}\theta - \cos\theta)^2$.

$$x^2 = (-1)^2 + 4$$

$$x^2 = 1 + 4 \quad | \quad x = \sqrt{5}$$

$$\rightarrow \left(\frac{2}{\sqrt{5}} - \frac{-1}{\sqrt{5}}\right)^2 \rightarrow \left(\frac{3}{\sqrt{5}}\right)^2$$

$$\frac{9}{5}$$

Halla el valor de F(180°); si:

$$F(x) = \frac{\cos\left(\frac{x}{2}\right) + \cos(2x) + \cos\left(\frac{3x}{2}\right)}{\sec(2x) - \cos x}$$

$$F(180) = \frac{\cos(90) + \cos(360) + \cos(270)}{\sec(360) - \cos(180)}$$

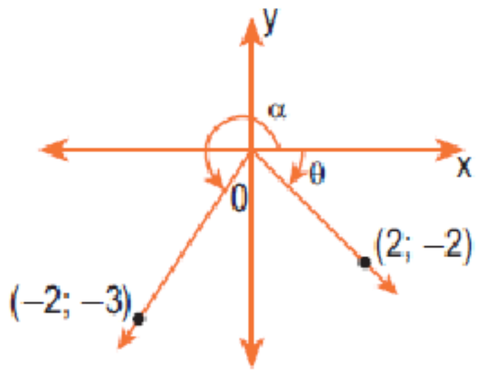
$$\frac{0 + 1 + 0}{1 - (-1)} = \frac{1}{2}$$

Si $\cos\alpha = -\frac{3}{5} \wedge \alpha \in$ IIC.

Halla el valor de:

$$R = \sqrt{\frac{3\text{sen}\alpha^2 - 4\cos\alpha^2}{5\tan\alpha}}$$

Del gráfico mostrado:



Halla el valor de:

$R = \cot\alpha + \operatorname{sen}\theta - \tan\alpha \cdot \tan\theta$

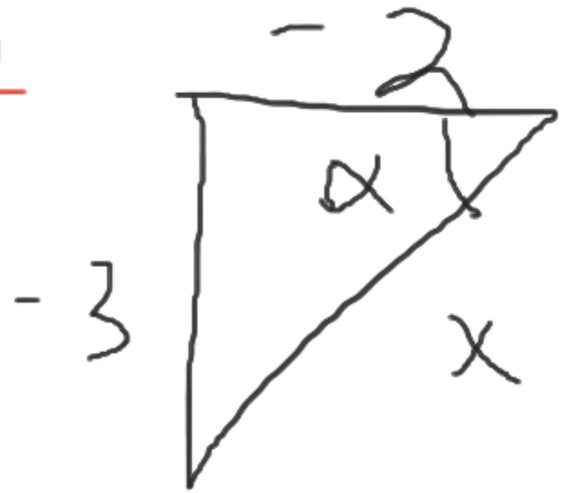
$\frac{-2}{-3} + \frac{-2}{\sqrt{8}} - \frac{-3}{-2} \cdot \frac{-2}{2}$

$\frac{-2\sqrt{8}+6}{-3\sqrt{8}}$

$\frac{6}{-4}$

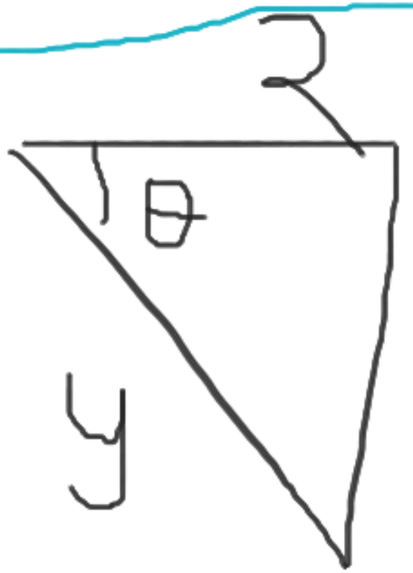
$\frac{4}{-3} - \frac{6}{-4} = \frac{-16-(-18)}{12} = \frac{2}{12}$

$\frac{1}{6}$



$x^2 = 9 + 4$

$x = \sqrt{13}$



$y^2 = 4 + 4$

$y = \sqrt{8}$

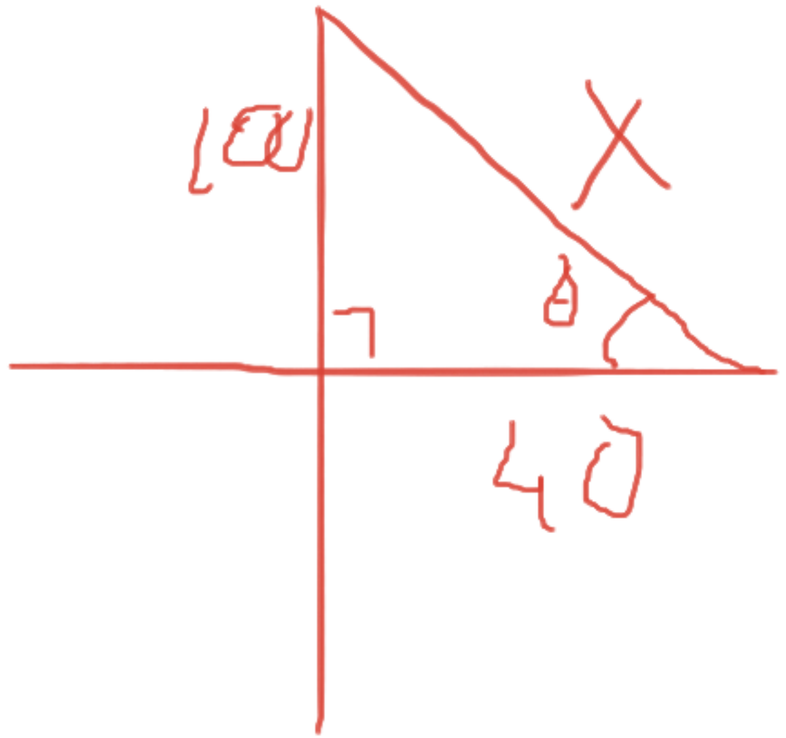
Si $\theta \in \langle 40°; 100°]$.

Halla el signo de $P = \tan\frac{\theta}{2} + \cos\left(-\frac{\theta}{4}\right)$

$$x^2 = 10000 + 1600$$

$$x = \sqrt{11600}$$

$$P = \frac{\frac{100}{4}}{\frac{2}{1}}$$

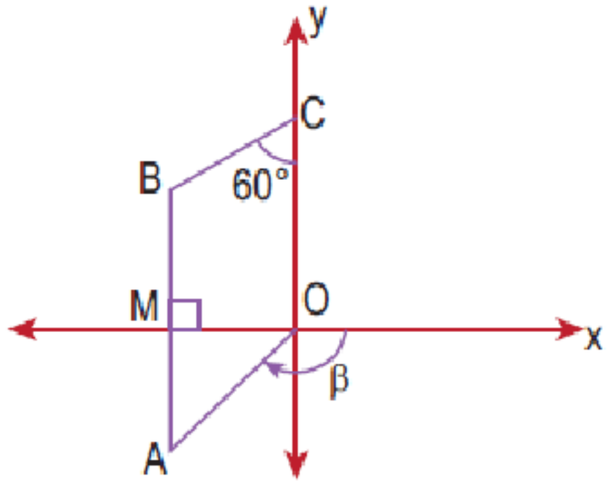


$$\cos\left(-\frac{40}{\sqrt{11600}}\right)$$

$$\frac{100}{8} + \frac{40}{4\sqrt{2900}}$$

$$\frac{\frac{40}{\sqrt{76400}}}{\frac{4}{1}}$$

Del gráfico, halla: senβ.



Si: $BM = MA = BC$; $\overrightarrow{AB} // \overrightarrow{OC}$

Del gráfico; si $\operatorname{sen}\theta + 2\cos\theta = 0$, calcula a.