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	$\text{sen } 37^\circ = \frac{87}{a} \rightarrow a \cdot \text{sen } 37^\circ = 87 \rightarrow a = \frac{87}{\text{sen } 37^\circ} = 144'5627m$ $\text{cos } 37^\circ = \frac{c}{a}$ $\text{tg } 37^\circ = \frac{87}{c} \rightarrow c \cdot \text{tg } 37^\circ = 87 \rightarrow c = \frac{87}{\text{tg } 37^\circ} = 115'4529m$ <p>Comprobación:</p> $144'5627^2 = 87^2 + 115'4529^2$ $20898'37 = 20898'37$
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3)

	$\text{sen } 22'5^\circ = \frac{10}{r} \rightarrow r \cdot \text{sen } 22'5^\circ = 10 \rightarrow r = \frac{10}{\text{sen } 22'5^\circ} = 26'1313cm$ $\text{tg } 22'5^\circ = \frac{10}{a} \rightarrow a \cdot \text{tg } 22'5^\circ = 10 \rightarrow a = \frac{10}{\text{tg } 22'5^\circ} = 24'1421cm$ <p>Solución: el radio mide 26'1313 cm y la apotema 24'1421 cm</p>
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1.

a)

$$\text{sen } \alpha = \frac{7}{25} = 0'28$$

$$\text{cos } \alpha = \frac{x}{25} = \frac{24}{25} = 0'96$$

T.P.  $25^2 = 7^2 + x^2$ ;  $x^2 = 25^2 - 7^2$ ;  $x = \sqrt{25^2 - 7^2} = 24$

$$\text{tg } \alpha = \frac{\text{sen } \alpha}{\text{cos } \alpha} = \frac{0'28}{0'96} = 0'2917 \quad \text{o de otra forma} \quad \text{tg } \alpha = \frac{7}{24} = 0'2917$$

De otra forma:

$$\text{sen } \alpha = \frac{7}{25} = 0'28$$

F.F.T.  $\text{sen}^2 \alpha + \text{cos}^2 \alpha = 1$ ;  $0'28^2 + \text{cos}^2 \alpha = 1$ ;  $\text{cos}^2 \alpha = 1 - 0'28^2$

$$\text{cos } \alpha = \sqrt{1 - 0'28^2} = 0'96$$

De otra forma:

$$\text{sen } \alpha = \frac{7}{25} = 0'28$$

Usando la calculadora:  $\alpha = \text{arc sen } 0'28 = 16'2602047....$

$$\text{cos } \alpha = 0'96$$