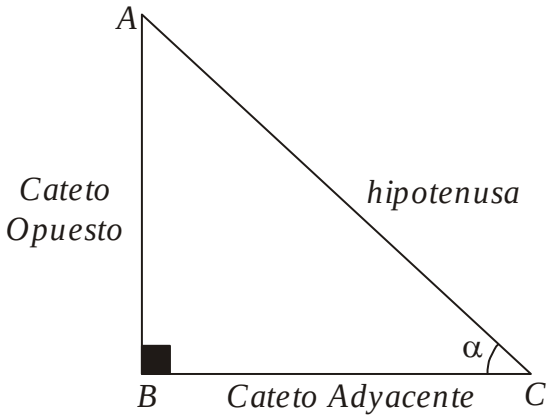
RAZONES TRIGONOMÉTRICAS II

TRIGONOMETRIA

(tangente – cotangente)

Tenemos que recirdar:

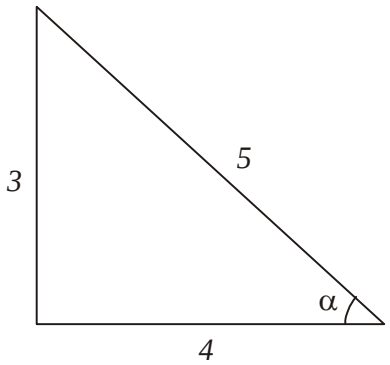


Entonces:

- *tangente de :* $tg\alpha = \dfrac{Cateto\ Opuesto}{Cateto\ Adyacente}$
- *cotangente de :* $ctg\alpha = \dfrac{Cateto\ Adyacente}{Cateto\ Opuesto}$

Ejemplos:

1. *Calcular si:*



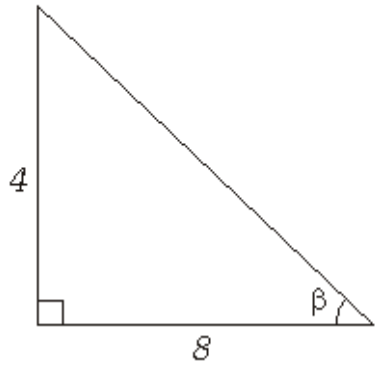
Resolución:

$$tg\alpha = \frac{Cateto\ Opuesto}{Cateto\ Adyacente}$$

$$tg\alpha = \frac{3}{4}$$

TRIGONOMETRIA

2. *Calcular la ctgβ.*



Resolución:

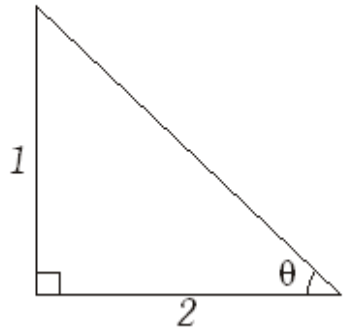
Sabemos que :

$$ctg\beta = \frac{Cateto\ Adyacente}{Cateto\ Opuesto}$$

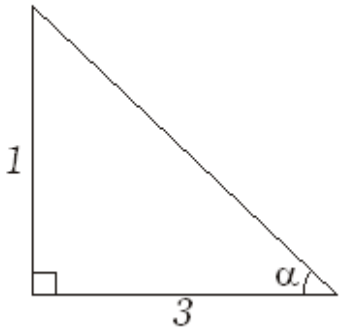
$$ctg\beta = \frac{\overset{2}{\cancel{8}}}{\underset{1}{\cancel{4}}} \Leftarrow simplificando$$

$$ctg\beta = 2$$

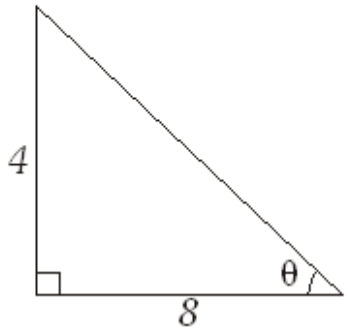
1. *Calcular tgθ si:*



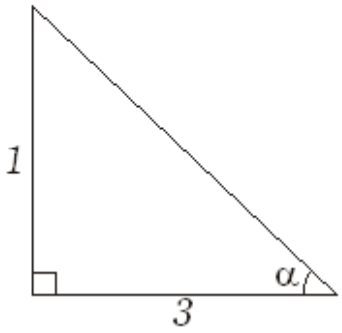
2. *Calcular ctgα si:*



3. *Calcular tgθ si:*



4. *Calcular ctgα si:*



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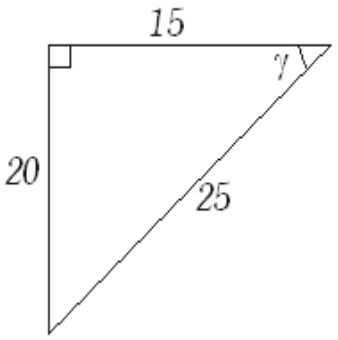
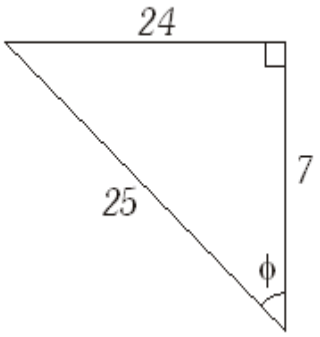
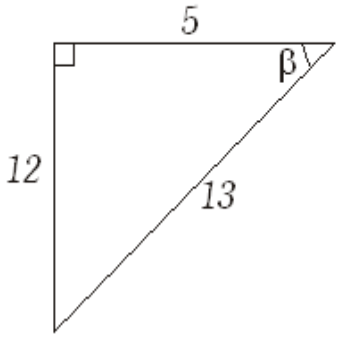
5. Calcular $4tg\gamma$ si:



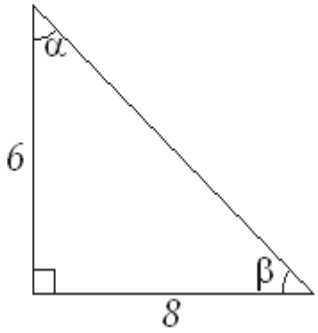
6. Calcular: $10\,ctg\phi$ si:



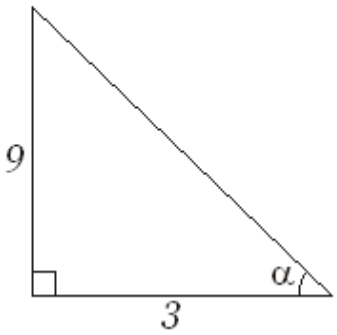
7. Calcular: $P = 2ctg\beta$



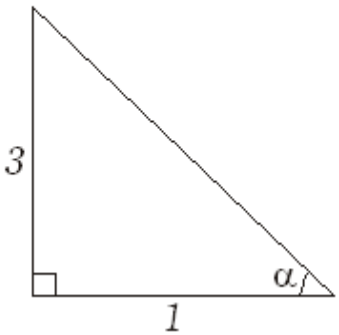
8. Calcular $M = tg\alpha \cdot ctg\beta$



1. Calcular $tg\theta$ si:



2. Calcular $ctg\alpha$ si:



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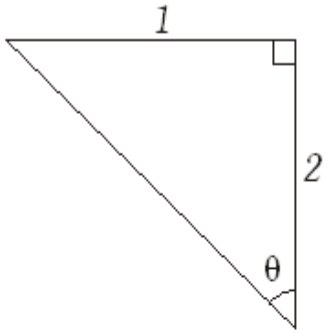
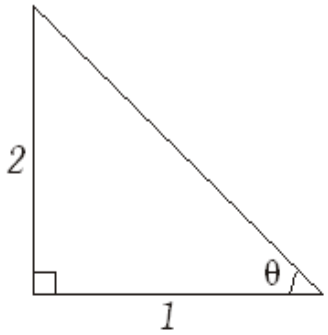
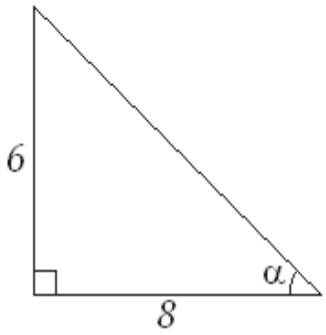
3. Calcular $E = 20\,tg\theta$



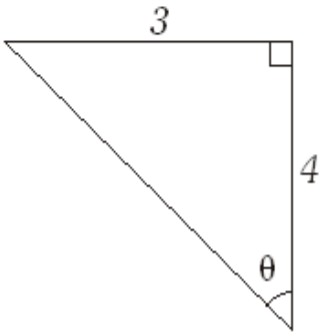
4. Calcular $12\,ctg\alpha$



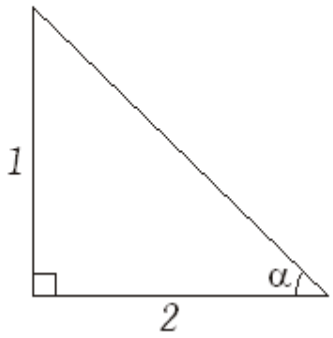
5. Calcular $tg\alpha \cdot ctg\alpha$



6. Calcular $N = tg\theta + ctg\theta$



7. Calcular $tg^2\alpha + ctg^2\alpha$



8. Calcular $tg^2\theta + ctg^2\theta$