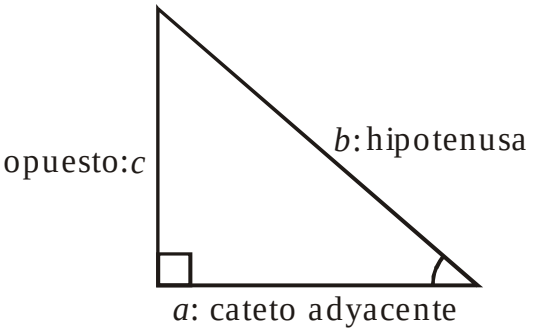
SECANTE Y COSECANTE

Tenemos que:



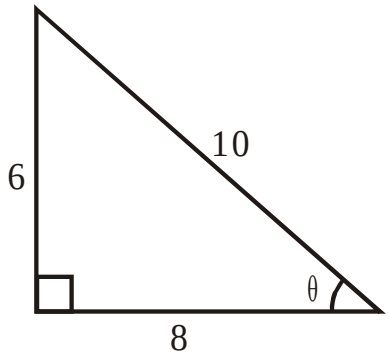
Entonces:

- Secante de $\alpha = \sec\alpha = \dfrac{\text{hipotenusa}}{\text{cateto adyacente}}$
- Cosecante de $\alpha = \csc\alpha = \dfrac{\text{hipotenusa}}{\text{cateto opuesto}}$

Ejemplos:

1. Calcular si:

Resolución



Sabemos que:

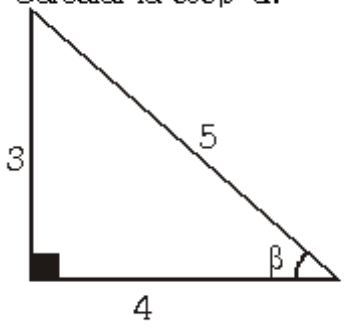
$$\sec\phi = \frac{\text{hipotenusa}}{\text{cateto adyacente}}$$

$$\sec\phi = \frac{\frac{5}{10}}{\frac{8}{4}} \Leftarrow \text{simplificado}$$

$$\boxed{\sec\phi = \frac{5}{4}}$$

TRIGONOMETRIA

2. Calcular la $\csc\beta$ si:



Resolución:

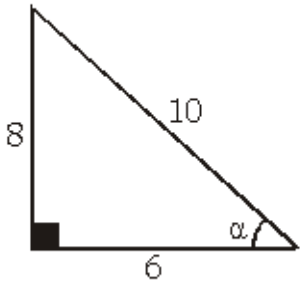
Sabemos que:

$$\csc\beta = \frac{\text{hipotenusa}}{\text{cateto opuesto}}$$

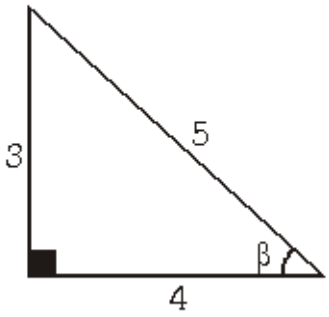
$$\boxed{\csc\beta = \frac{5}{3}}$$

PRÁCTICA

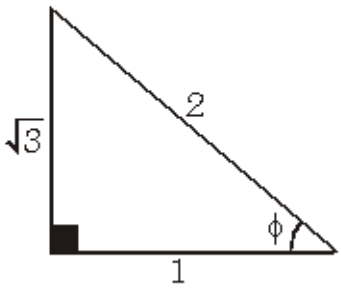
1. Calcular la $\sec\alpha$ si:



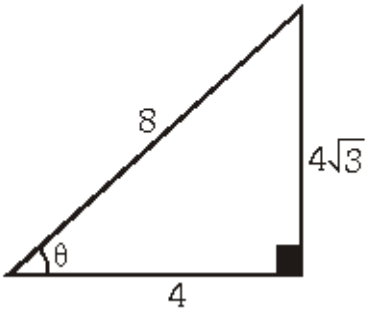
2. Calcular la $\csc\beta$ si:



3. Calcular la $\sec\phi$ si:

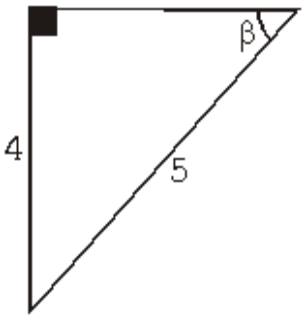


4. Calcular la $\sec\theta$ si:

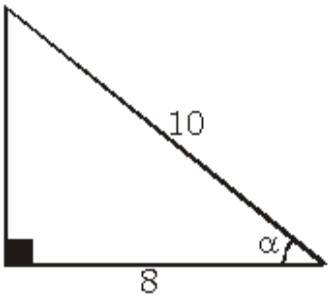


TRIGONOMETRIA

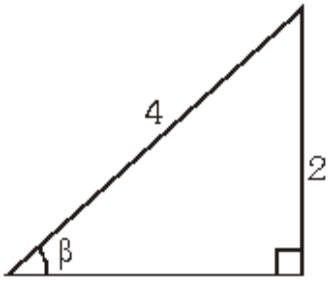
5. Calcular la $\csc\beta$ si:



6. Calcular la $\csc\alpha$ si:



7. Calcular $4\csc\beta$



8. Calcular M = $\sec\theta + \csc\theta$