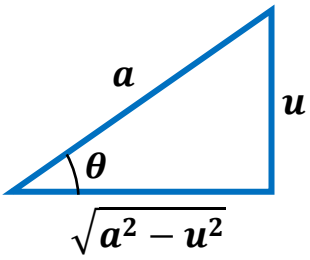
Fórmulas para integración por sustitución trigonométrica

$a^2 - u^2$
$u = a\,sen\theta$
$du = a\,cos\theta\,d\theta$
$a^2 - u^2 = a^2 cos^2\theta$



$$sen\theta = \frac{u}{a}$$

$$cos\theta = \frac{\sqrt{a^2 - u^2}}{a}$$

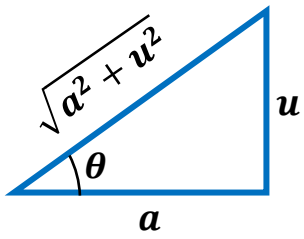
$$tan\theta = \frac{u}{\sqrt{a^2 - u^2}}$$

$$cot\theta = \frac{\sqrt{a^2 - u^2}}{u}$$

$$sec\theta = \frac{a}{\sqrt{a^2 - u^2}}$$

$$csc\theta = \frac{a}{u}$$

$a^2 + u^2$
$u = a\,tan\theta$
$du = a\,sec^2\theta\,d\theta$
$a^2 + u^2 = a^2 sec^2\theta$



$$sen\theta = \frac{u}{\sqrt{a^2 + u^2}}$$

$$cos\theta = \frac{a}{\sqrt{a^2 + u^2}}$$

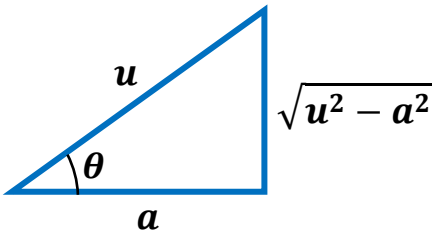
$$tan\theta = \frac{u}{a}$$

$$cot\theta = \frac{a}{u}$$

$$sec\theta = \frac{\sqrt{a^2 + u^2}}{a}$$

$$csc\theta = \frac{\sqrt{a^2 + u^2}}{u}$$

$u^2 - a^2$
$u = a\,sec\theta$
$du = a\,sec\theta\,tan\theta\,d\theta$
$u^2 - a^2 = a^2 tan^2\theta$



$$sen\theta = \frac{\sqrt{u^2 - a^2}}{u}$$

$$cos\theta = \frac{a}{u}$$

$$tan\theta = \frac{\sqrt{u^2 - a^2}}{a}$$

$$cot\theta = \frac{a}{\sqrt{u^2 - a^2}}$$

$$sec\theta = \frac{u}{a}$$

$$csc\theta = \frac{u}{\sqrt{u^2 - a^2}}$$

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