

Tabela de Derivadas	
f	f'
$u^\alpha, \alpha \in \mathbb{R}$	$\alpha u^{\alpha-1} u'$
$\ln u$	$\frac{u'}{u}$
$\log_a u$	$\frac{1}{\ln a} \frac{u'}{u}$
$\sin u$	$u' \cos u$
$\cos u$	$-u' \sin u$
$\tan u$	$u' \sec^2 u$
$\cot u$	$-u' \operatorname{cosec}^2 u$
$\sec u$	$u' \sec u \tan u$
$\operatorname{cosec} u$	$-u' \operatorname{cosec} u \cot u$
e^u	$u' e^u$
a^u	$u' a^u \ln a$

Algumas relações trigonométricas

$$\sin(\alpha + \beta) = \sin \alpha \cos \beta + \cos \alpha \sin \beta$$

$$\cos(\alpha + \beta) = \cos \alpha \cos \beta - \sin \alpha \sin \beta$$

$$\sin^2 \alpha = \frac{1}{2} (1 - \cos 2\alpha)$$

$$\cos^2 \alpha = \frac{1}{2} (1 + \cos 2\alpha)$$

$$\tan^2 \alpha = \sec^2 \alpha - 1$$