

LEMBAR KERJA PESERTA DIDIK

Materi : Turunan Fungsi Trigonometri

Nama :

Kelas : XII

Kelas :



Masih Ingatkah ?

Fungsi	Turunan
$f(x) = \sin x$	$f'(x) = \text{...}$
$f(x) = \cos x$	$f'(x) = \text{...}$



Mari Mencoba !

Dengan menggunakan sifat-sifat turunan, buktikan rumus berikut :

1. Jika $y = f(x) = \tan x$, maka $y' = f'(x) = \text{cosec}^2 x$
2. Jika $y = f(x) = \sec x$, maka $y' = f'(x) = \sec x \tan x$

Fungsi	Turunan
	Ingat...!
	$y' = \frac{u'v - uv'}{v^2}$
$y = f(x) = \tan x$	$u = \sin x \quad \rightarrow \quad u' = \text{...}$
	$v = \text{...} \quad \rightarrow \quad v' = -\sin x$
$y = f(x) = \frac{\sin x}{\text{...}}$	$y' = \frac{(\text{...}) \cos x - (\text{...})(-\sin x)}{(\text{...})^2}$
	$y' = \frac{\text{...} - \text{...}}{(\text{...})^2}$
	$y' = \frac{\text{...}}{(\text{...})^2} = \text{...}$

Fungsi	Turunan
$y = f(x) = \sec x$ $y = f(x) = \frac{1}{\boxed{}}$	<p>Ingat...!</p> $y' = \frac{u'v - uv'}{v^2}$ $u = 1 \quad \rightarrow \quad u' = \boxed{}$ $v = \boxed{} \quad \rightarrow \quad v' = -\sin x$ $y' = \frac{(\boxed{}) \cos x - (\boxed{})(-\sin x)}{(\boxed{})^2}$ $y' = \frac{\boxed{} - \boxed{}}{(\boxed{})^2}$ $y' = \frac{\boxed{}}{(\boxed{})^2}$ $y' = \frac{1}{\boxed{}} \cdot \frac{\boxed{}}{\cos x}$ $y' = \boxed{} \boxed{}$