

TURUNAN FUNGSI TRIGONOMETRI

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TUJUAN

Pembelajaran

- Peserta didik mampu memahami turunan fungsi trigonometri dengan menggunakan sifat-sifatnya.
- Peserta didik mampu mengidentifikasi masalah yang berkaitan dengan turunan fungsi trigonometri.
- Peserta didik mampu menentukan penyelesaian masalah yang berkaitan dengan turunan fungsi trigonometri.

Nama Kelompok :



SUMBER BELAJAR



A. Dasar Turunan Fungsi Trigonometri

- $f(x) = x^n$ maka, $f'(x) = \dots \times \dots$
- $f(x) = ax^n$ maka, $f'(x) = \dots \times \dots \times \dots^{n-1}$

B. Sifat – Sifat Turunan Fungsi Trigonometri

- $f(x) = u + v$ maka, $f'(x) = u' + v'$
- $f(x) = u - v$ maka, $f'(x) = \dots - \dots$
- $f(x) = uv$ maka, $f'(x) = u' \cdot \dots + \dots \cdot \dots$
- $f(x) = \frac{u}{v}$ maka, $f'(x) = \frac{\dots - \dots}{\dots^2}$

C. Kegiatan 1 : Mengingat!

1. $f(x) = 7$
 $f'(x) =$

2. $f(x) = x$
 $f'(x) =$

3. $f(x) = 4x^2$
 $f'(x) =$

4. $f(x) = 2(x^2 - 3)^2$
 $f'(x) =$

D. KEGIATAN 2 : AYO BERLATIH!

$$1. \quad f(x) = \sin x + \cos x$$

$$f'(x) = \dots + (\dots)$$

$$f'(x) = \dots - \dots$$

$$2. \quad f(x) = 2x^2 + \sin x$$

$$f'(x) = \dots + \dots$$

$$3. \quad f(x) = \sin x - \cos x$$

$$f'(x) = \dots - (\dots)$$

$$f'(x) = \dots + \dots$$

$$4. \quad f(x) = x^2 \cdot \sin x$$

$$u = \dots \quad u' = \dots$$

$$v = \dots \quad v' = \dots$$

$$f'(x) = \dots \cdot \dots + \dots \cdot \dots$$

$$f'(x) = \dots + \dots \cdot \dots$$

$$5. \quad f(x) = \frac{\sin x}{\cos x}$$

$$u = \dots \quad u' = \dots$$

$$v = \dots \quad v' = \dots$$

$$f'(x) = \frac{\dots - \dots}{\dots}$$

$$f'(x) = \frac{\dots + \dots}{\dots}$$

$$f'(x) = \frac{\dots}{\dots}$$

$$f'(x) = \dots$$