

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

tentukan $f'(x)$

Penyelesaian

Misalkan : $u = \dots$ $\rightarrow u' = \dots$

$v = \dots$ $\rightarrow v' = \dots$

$$\begin{aligned} f'(x) &= u' \cdot v + u \cdot v' \\ &= \dots + \dots \\ &= \dots (\dots + \dots) \end{aligned}$$

2. $g(x) = (3x - 4) \cdot \cos (2x + 1)$

$g'(x) = \dots$

Penyelesaian

Misalkan : $u = \dots$ $\rightarrow u' = \dots$

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

$$\begin{aligned} g'(x) &= u' \cdot v + u \cdot v' \\ &= \dots + \dots \\ &= \dots + \dots \end{aligned}$$

3. $f(x) = \frac{\sin x}{1-3x}$

$f'(x) = \dots$

Penyelesaian

Misalkan : $u = \dots$ $\rightarrow u' = \dots$

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

$$\begin{aligned} f'(x) &= \frac{u' \cdot v - u \cdot v'}{v^2} \\ &= \frac{\dots - \dots}{\dots} \\ &= \frac{\dots}{\dots} \end{aligned}$$

4. Jika $f(x) = \sin 2x \cos x$, maka $f'(x) = \dots$