

LEMBAR KERJA PESERTA DIDIK (LKPD) TURUNAN FUNGSI

Pertemuan ke 1 : Menjelaskan konsep turunan fungsi

Kelas :

Kelompok ke :

Ketua Kelompok:

Anggota 1.

2.

3.

4.

5.

Tentukan Turunan Fungsi dari fungsi berikut.

1. $f(x) = 5$

$$f'(x) = \frac{dy}{dx} = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{} - \boxed{}}{h}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{}}{h}$$

$$= \lim_{h \rightarrow 0} \boxed{}$$

$$f'(x) = \frac{dy}{dx} = \boxed{}$$

2. $g(x) = x$

$$g'(x) = \frac{dy}{dx} = \lim_{h \rightarrow 0} \frac{g(x+h) - g(x)}{h}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{} - \boxed{}}{h}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{}}{h}$$

$$= \lim_{h \rightarrow 0} \boxed{}$$

$$g'(x) = \frac{dy}{dx} = \boxed{}$$

3. $h(x) = x^2$

$$h'(x) = \frac{dy}{dx} = \lim_{h \rightarrow 0} \frac{h(x+h) - h(x)}{h}$$

$$= \lim_{h \rightarrow 0} \frac{(\boxed{})^2 - \boxed{}}{h}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{} - \boxed{}}{h}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{}}{h}$$

$$= \lim_{h \rightarrow 0} \frac{h(\boxed{})}{h}$$

$$= \lim_{h \rightarrow 0} \boxed{}$$

$$= \boxed{}$$

$$h'(x) = \frac{dy}{dx} = \boxed{}$$

$$4. \ k(x) = \frac{1}{x}$$

$$k'(x) = \frac{dy}{dx} = \lim_{h \rightarrow 0} \frac{k(x+h) - k(x)}{h}$$

$$= \lim_{h \rightarrow 0} \frac{\frac{1}{\boxed{}} - \frac{1}{\boxed{}}}{h}$$

$$= \lim_{h \rightarrow 0} \frac{1(\boxed{}) - 1(\boxed{})}{(x+h)x}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{}}{(x+h)x}$$

$$= \lim_{h \rightarrow 0} \frac{\boxed{}}{(x+h)x}$$

$$= \frac{\boxed{}}{(x+\boxed{})x}$$

$$= \frac{\boxed{}}{\boxed{}}$$

$$k'(x) = \frac{dy}{dx} = \frac{\boxed{}}{\boxed{}}$$