

Rahmatullah  
102210207  
UKL

No. \_\_\_\_\_

Date: \_\_\_\_\_

☐

☐ 1.

$$\lim_{t \rightarrow 0} (\sin t - t) / t^2$$

☐

$$= \sin(0)$$

☐

$$= 0^0$$

☐

$$= 1$$

☐

☐ 2.

$$\lim_{t \rightarrow 0} (\sin t - t) / t^2$$

☐

$$= \lim_{t \rightarrow 0} (\sin t - t) / t^2$$

☐

$$= \lim_{t \rightarrow 0} \left( \frac{d/dt (\sin t - t)}{d/dt t^2} \right)$$

☐

$$= \lim_{t \rightarrow 0} \left( \frac{\cos t - 1}{2t} \right)$$

☐

$$= \frac{\cos(0) - 1}{2(0)}$$

☐

$$= \frac{1-1}{0} = \frac{0}{0} \rightarrow \text{tak tentu}$$

☐

$$\rightarrow \lim_{t \rightarrow 0} \left( \frac{d/dt (\cos t - 1)}{d/dt 2t} \right)$$

☐

$$= \lim_{t \rightarrow 0} \left( -\frac{\sin t}{2} \right)$$

☐

$$= -\frac{\sin(0)}{2}$$

☐

$$= \frac{0}{2} = 0$$

☐

☐

☐

☐