

## Limit Fungsi Aljabar Dengan Cara Pemfaktoran

Nama:

Kelas:

$$\begin{aligned} 1. \lim_{x \rightarrow 1} \frac{x^2 - 5x + 4}{x - 1} &= \lim_{x \rightarrow 1} \frac{(x - \boxed{\phantom{00}}) \cdot (x - \boxed{\phantom{00}})}{(x - \boxed{\phantom{00}})} \\ &= \lim_{x \rightarrow 1} (x - \boxed{\phantom{00}}) \\ &= (\boxed{\phantom{00}}) - 4 \\ &= \boxed{\phantom{00}} \end{aligned}$$

Maka nilai limit  $\lim_{x \rightarrow 1} \frac{x^2 - 5x + 4}{x - 1}$  adalah

$$\begin{aligned} 2. \lim_{x \rightarrow 4} \frac{x - 4}{x^2 - 16} &= \lim_{x \rightarrow 4} \frac{(x - \boxed{\phantom{00}})}{(x - \boxed{\phantom{00}}) \cdot (x + \boxed{\phantom{00}})} \\ &= \lim_{x \rightarrow 4} \frac{1}{(x + \boxed{\phantom{00}})} \\ &= \frac{1}{(\boxed{\phantom{00}}) + 4} \\ &= \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} \end{aligned}$$

Maka nilai limit  $\lim_{x \rightarrow 4} \frac{x - 4}{x^2 - 16}$  adalah  $\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$

$$\begin{aligned} 3. \lim_{x \rightarrow -5} \frac{x^2 + 5x}{x^2 - 25} &= \lim_{x \rightarrow -5} \frac{x(x + \boxed{\phantom{00}})}{(x - \boxed{\phantom{00}}) \cdot (x + \boxed{\phantom{00}})} \\ &= \lim_{x \rightarrow -5} \frac{x}{(x - \boxed{\phantom{00}})} \\ &= \frac{(\boxed{\phantom{00}})}{(\boxed{\phantom{00}}) - 5} \\ &= \frac{-5}{\boxed{\phantom{00}}} \\ &= \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} \end{aligned}$$

Maka nilai limit  $\lim_{x \rightarrow -5} \frac{x^2 + 5x}{x^2 - 25}$  adalah  $\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$