

# LKPD

## LIMIT FUNGSI ALJABAR

### MATEMATIKA WAJIB XI MIPA

NAMA: .....

KELAS: .....

LENGKAPILAH TITIK-TITIK DIBAWAH INI!

1  $\lim_{x \rightarrow -5} \frac{x-5}{x^2+6x+5} = \frac{\dots - \dots}{\dots + \dots + \dots} = \frac{\dots}{\dots}$

2  $\lim_{x \rightarrow 2} \frac{x^2+2x-8}{x^2-4} = \frac{\dots + \dots - \dots}{\dots - \dots} = \frac{\dots}{\dots}$

$$\lim_{x \rightarrow 2} \frac{x^2+2x-8}{x^2-4} = \lim_{x \rightarrow 2} \frac{(\dots)(\dots)}{(\dots)(\dots)} = \lim_{x \rightarrow 2} \frac{(\dots)}{(\dots)} = \frac{\dots}{\dots} = \frac{\dots}{\dots}$$

3  $\lim_{x \rightarrow 4} \frac{3-\sqrt{x^2-7}}{x^2-2x-8} = \frac{\dots - \dots}{\dots - \dots - \dots} = \frac{\dots}{\dots}$

$$\begin{aligned} \lim_{x \rightarrow 4} \frac{3-\sqrt{x^2-7}}{x^2-2x-8} &= \frac{3-\sqrt{x^2-7}}{-(x^2-\dots)} \\ &= \lim_{x \rightarrow 4} \frac{3-\sqrt{x^2-7}}{x^2-2x-8} \times \frac{\dots + \sqrt{x^2-7}}{\dots + \sqrt{x^2-7}} = \lim_{x \rightarrow 4} \frac{3^2 - (\sqrt{x^2-7})^2}{(x^2-2x-8)(3+\sqrt{x^2-7})} \\ &= \lim_{x \rightarrow 4} \frac{-(x^2-\dots)}{(x^2-2x-8)(3+\sqrt{x^2-7})} \\ &= \lim_{x \rightarrow 4} \frac{-(x-\dots)(x+\dots)}{(x-\dots)(x+2)(3+\sqrt{x^2-7})} \\ &= \lim_{x \rightarrow 4} \frac{-(x+4)}{(x+2)(3+\sqrt{x^2-7})} = \frac{-(\dots + \dots)}{(\dots + 2)(3 + \sqrt{\dots - 7})} = \frac{\dots}{\dots} \end{aligned}$$