

$$\begin{aligned}
 \mathbf{13.} \quad & \lim_{x \rightarrow 3} \frac{x^2 - 6x + 9}{x^2 - 9} &= & \lim_{x \rightarrow 3} \frac{(x - 3)^2}{(x - 3)(x + 3)} \\
 &= \lim_{x \rightarrow 3} \frac{x - 3}{x + 3} = \frac{0}{6} = 0
 \end{aligned}$$