

22. $\lim_{x \rightarrow 2} \frac{|x-2|}{x-2} = \lim_{x \rightarrow 2} \begin{cases} 1, & \text{if } x > 2 \\ -1, & \text{if } x < 2. \end{cases}$

Hence, $\lim_{x \rightarrow 2} \frac{|x-2|}{x-2}$ does not exist.