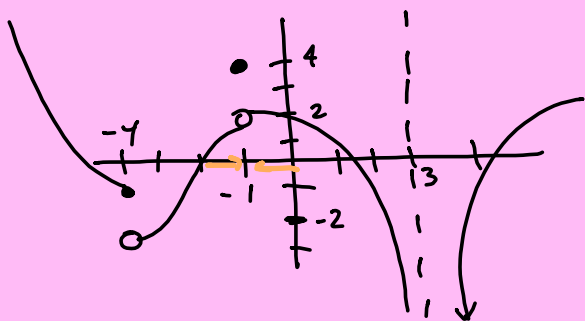


# LIMITS REVIEW



$$\lim_{x \rightarrow -4^-} f(x) = -1$$

$$\lim_{x \rightarrow 1} f(x) = \text{DNE}$$

$$\lim_{x \rightarrow -1} f(x) = 2$$

$$\lim_{x \rightarrow 3^-} f(x) = -\infty$$

$$\lim_{x \rightarrow 0} \frac{\sin 2x}{8x}$$

$$\frac{1}{4} \lim_{x \rightarrow 0} \frac{\sin 2x}{2x}$$

$$= \frac{1}{4} \cdot 1$$

$$= \frac{1}{4}$$

$$\lim_{x \rightarrow 0} \frac{\frac{1}{x} \sin 6x}{\frac{1}{x} \sin 8x}$$

$$\lim_{x \rightarrow 0} \frac{\frac{6}{6} \cdot \frac{\sin 6x}{x}}{\frac{8}{8} \cdot \frac{\sin 8x}{x}}$$

$$\frac{6}{8} \lim_{x \rightarrow 0} \frac{\frac{\sin 6x}{6x}}{\frac{\sin 8x}{8x}}$$

$$\frac{3}{4} \cdot 1 = \frac{3}{4}$$

$$\lim_{x \rightarrow 0^+} e^{\frac{1}{x}}$$

$$\lim_{x \rightarrow 0^+} e^{\frac{1}{0^+}}$$

$$\lim_{x \rightarrow 0} e^{+\infty} = +\infty$$

$$\lim_{x \rightarrow -\infty} e^x = 0$$

$$\lim_{x \rightarrow 0^+} \ln x = -\infty$$

$$\lim_{x \rightarrow \infty} \csc\left(\frac{5}{2x}\right)$$

$$\csc\left(\frac{5}{\infty}\right) = \csc 0$$

