

## Exercises:

1. Find the limit if it exists:

(a)  $\lim_{x \rightarrow \infty} \frac{\sin(x)}{15x^3}$

(b)  $\lim_{x \rightarrow \infty} \frac{2x^3-1}{x^2+5}$

(c)  $\lim_{x \rightarrow \infty} \frac{xe^x}{x^2-1}$

(d)  $\lim_{x \rightarrow \infty} \frac{2 \ln(x)}{\sqrt{x-5}}$