

Lesson 23

Read 4.5, 4.7

More examples

Draw the graph of $f(x) =$

Domain : for which values of x can we compute $f(x)$?

Horizontal asymptotes :

Compute $\lim_{x \rightarrow -\infty} f(x)$ if the domain of f allows it

Compute $\lim_{x \rightarrow \infty} f(x)$ if the domain of f allows it

Vertical asymptotes :

if f is not defined at $x = a$ but it is defined to the left of a
compute $\lim_{x \rightarrow a^-} f(x)$

if f is not defined at $x = a$ but it is defined to the right of a
compute $\lim_{x \rightarrow a^+} f(x)$

Compute $f'(x)$, intervals of increase, decrease, local min and max

Compute $f''(x)$, inflection points and intervals where f is concave up and down .

Find x and y intercepts

Draw graph

One more optimization problem