

- Exam 3: next week, probably Friday. Covers §3.10-4.6

§4.3 Graphing Functions

Graphing Guidelines:

1. Identify the domain or interval of interest.
2. Exploit symmetry.
3. Find the first and second derivatives.
4. Find critical points and possible inflection points.
5. Find intervals on which the function is increasing or decreasing, and concave up/down.
6. Identify extreme values and inflection points.
7. Locate vertical/horizontal asymptotes and determine end behavior.
8. Find the intercepts.
9. Choose an appropriate graphing window and make a graph.

Exercise

According to the graphing guidelines, sketch a graph of

$$f(x) = \frac{x^2}{x^2 - 4}.$$

4.3 Book Problems

7,8, 15-35 (odds), 45-53