

Introduction

Graphs:

- Understanding,
- Summarizing data,
- Representing data,
- Interpolating data,
- ...

Need maxima and minima ($y' = 0$, relative or absolute), inflection points ($y'' = 0$), vertical asymptotes ($y \rightarrow \infty, x$ finite), horizontal asymptotes ($x \rightarrow \infty, y$ finite), oblique asymptotes ($y \propto x \rightarrow \infty$), behavior at infinity ($x \rightarrow \infty$), intercepts (x or $y = 0$), singular points (corners, cusps, crossings, infinite curvature, ...), concavity (upward if $y'' > 0$), symmetry or anti-symmetry around x , y , or general oblique axes, ...) See page 133 in the 4th edition of Ayres.

If you can, draw the curve first, then fill in the details.