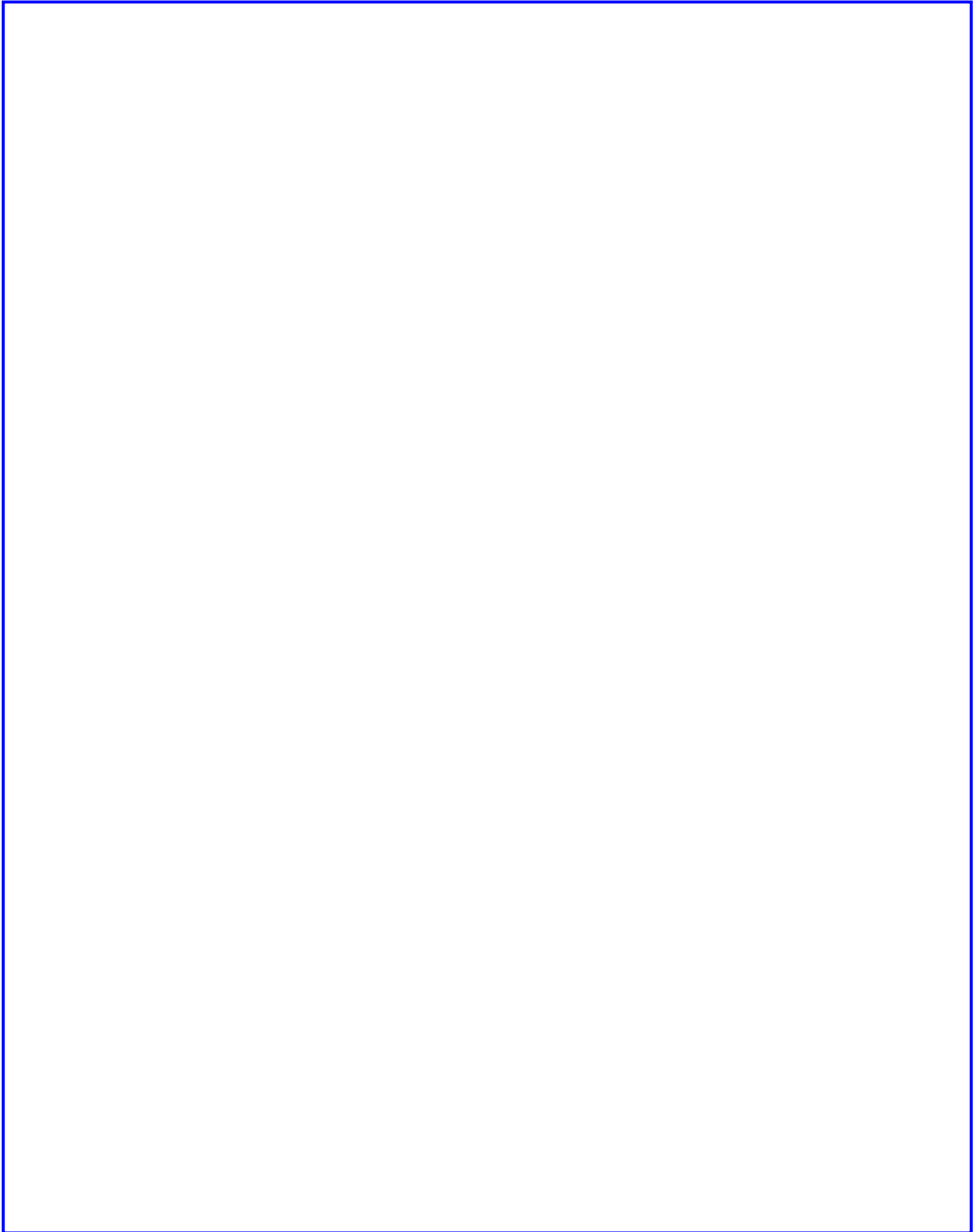


Section 4.4 –Curve Sketching

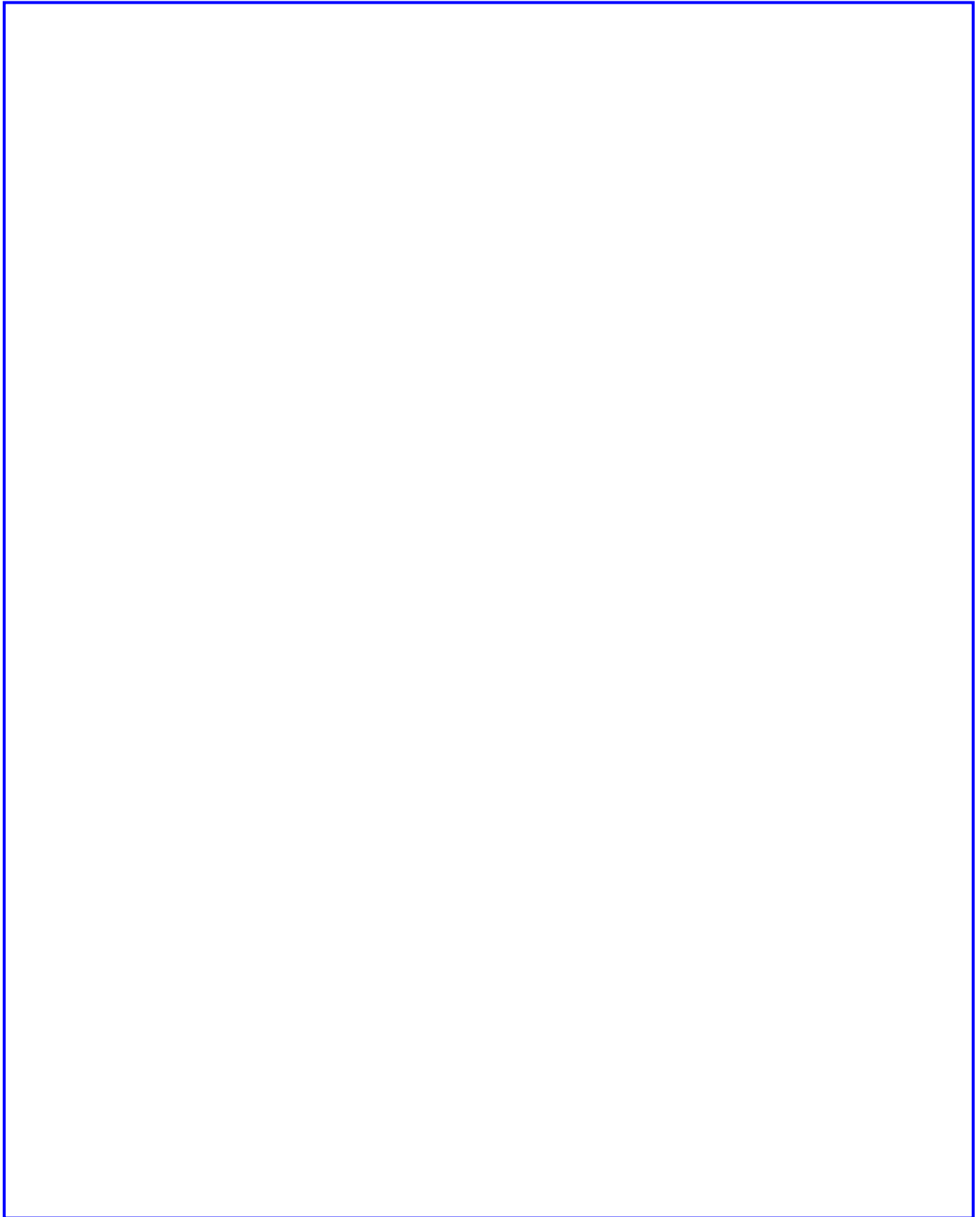
A Quick Guideline:

- When looking to sketch a function, it is a good idea to start with the function type.
- Find the domain.
- Find any asymptotes.
- Find any limits (if needed).
- Find the first and second derivative.
- Find any critical points, inflection points.
- Determine when it is increasing/decreasing, concave up/down.
- See the **supplemental** to sketching for a more detailed guideline.

- *Example. Sketch* $y = \frac{x}{(x-1)^2}$



- *Example. Sketch* $y = \sqrt{\frac{x}{x-5}}$.



- *Example. Sketch $y = x(\ln x)^2$*

