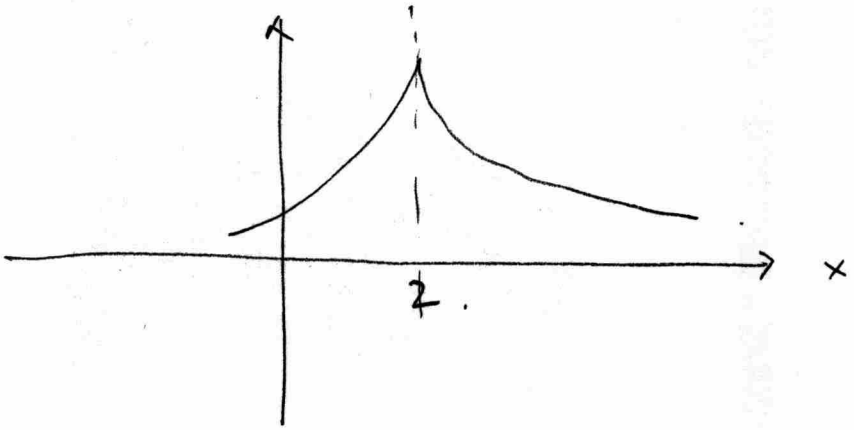
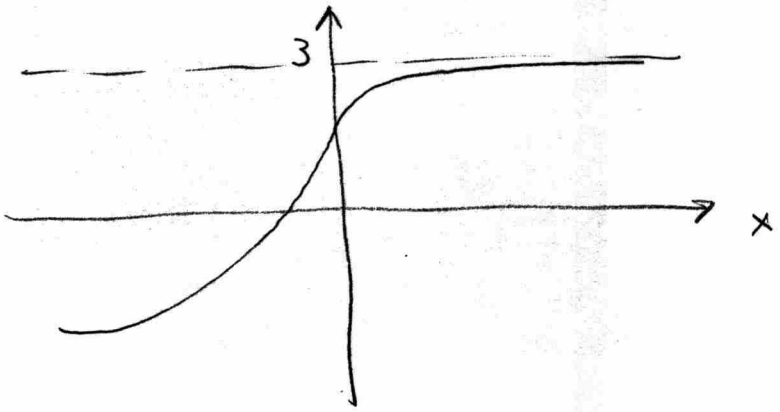
7. Sketch the graph of a function $f(x)$ that has an absolute maximum at $x = 2$ and whose first derivative does not exist at $x = 2$.

6 pts



8. Sketch the graph of a function $f(x)$ with all of the following properties: (a) $f'(x) > 0$ for all real x, (b) the graph has an inflection point at $x = 0$, (c) The graph has a horizontal asymptote at $y = 3$.

9 pts



9. Sketch the graph of a function $f(x)$ whose first derivative is positive for all real x and whose second derivative is negative for all real x. The graph is

(circle one) **concave up** **concave down** **neither one.**

9 pts