

DATE: \_\_\_\_\_

Sketch a graph of the function with the following information:

$$f(4) = 0$$

$$f'(x) > 0, x > 2$$

$$f'(x) > 0, x < 2$$

$$f''(x) > 0, x < -1$$

$$f''(x) < 0, x > -1$$

$$\lim_{x \rightarrow \infty} f(x) = 3$$

$$\lim_{x \rightarrow -\infty} f(x) = \infty$$