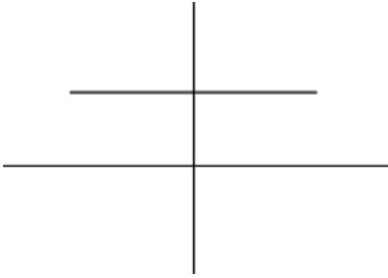


Keeper 3.5 – Curve Sketching f from f'

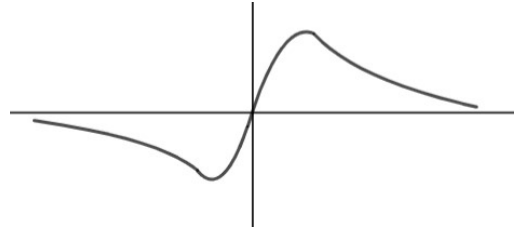
Virtual Problems

Sketch the graph of f given f'

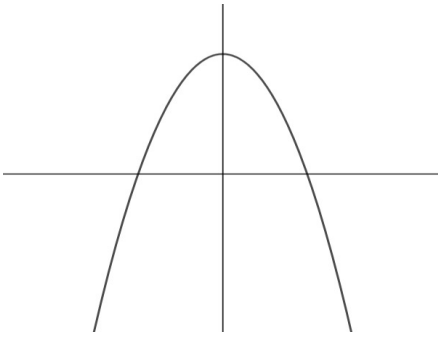
1.



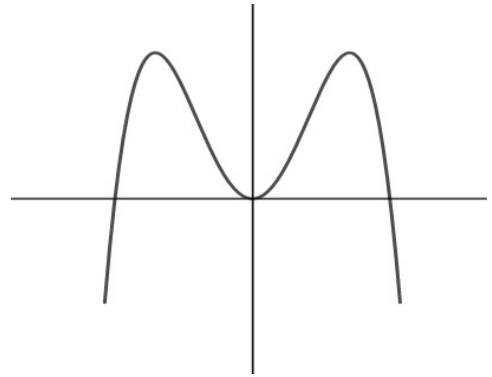
2.



3.



4.



Examples: Draw a possible Graph of $f(x)$ given the information below.

5. a. $f(x)$ is continuous
 b. $f'(x) < 0$ $(-\infty, 1)$
 c. $f'(x) > 0$ $(1, \infty)$
 d. $f'(x)$ is undefined at $x = 1$
 e. $f''(x) < 0$ at $(-\infty, 1) \cup (1, \infty)$

$$f'(x) \longleftrightarrow$$

$$f''(x) \longleftrightarrow$$

$$f(x)$$

6. a. $f(x)$ is continuous
 b. $f'(x) < 0$, $(-\infty, 2)$, $(2, \infty)$
 c. $f'(x)$ is undefined at $x = 2$
 d. $f''(x) < 0$, when $x < 2$
 e. $f''(x) > 0$ at $x = 0$, $x > 2$

$$f'(x) \longleftrightarrow$$

$$f''(x) \longleftrightarrow$$

$$f(x)$$

