

Honors Calculus

Chapter 3 Review

Topics:

Relative extrema (1st and 2nd Derivative Test)

Increasing/decreasing intervals

Points of inflection

Intervals of concavity

Sketching f' and f'' given f

Sketch a function given characteristics

Sketch a function given an equation

Page 242: 21, 25, 29, 33, 35, 37, 39, 41, 42, 65

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Sketch $f(x)$ given characteristics

(a) $f(x) > 0$ for all $x > 0$

(b) $f(x) < 0$ for all $x < 0$

(c) $f(0) = 0$

(d) $f'(x) > 0$ for all x

(e) $f''(x) > 0$ for all $x < 0$

(f) $f''(x) < 0$ for all $x > 0$

Sketching f' and f'' given f .

