

- Quiz 7 is to-day. Covers related rates. You are encouraged to work together and ask questions.
- Quiz 8 on Friday, stay tuned...
- next Monday Quiz: Optimization (§4.4) with Related Rates sprinkled in. Closed book. Not collaborative.

4.1-4.2 Practice Problems

Exercise (s)

- (1) Sketch the graph of a continuous function f on $[0, 4]$ satisfying the following:
- $f'(1) = f'(2) = f'(3) = 0$
 - f has an absolute min at $x = 1$
 - f has no local extremum at $x = 2$
 - f has absolute max at $x = 3$
- (2) Sketch the graph of a continuous function f that satisfies the following:
- f is continuous for all real numbers
 - $f'(x) < 0$ and $f''(x) < 0$ on $(-\infty, 0)$
 - $f'(x) > 0$ and $f''(x) > 0$ on $(0, \infty)$