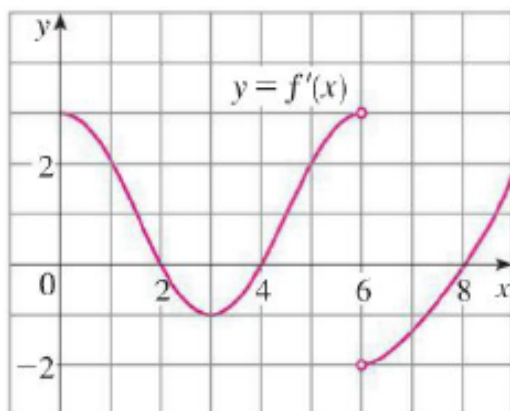


Quiz 16 — MA161 — October 31, 2018

Alden Bradford

1. (12 points) The graph of the **first derivative** of a function $f(x)$ is shown. Which of the statements below is/are correct? Answer true or false for each.



- (a) $f(x)$ is concave downward on $(5, 6)$
- (b) $f(x)$ is decreasing on $(2, 4)$
- (c) $f(x)$ has a local maximum at $x = 2$
2. Let $y = \frac{1}{12}x^4 - \frac{1}{3}x^3 + \frac{1}{2}x^2$.
- (a) (2 points) Find y'' .
- (b) (6 points) How many inflection points does the graph of y have? Be careful!