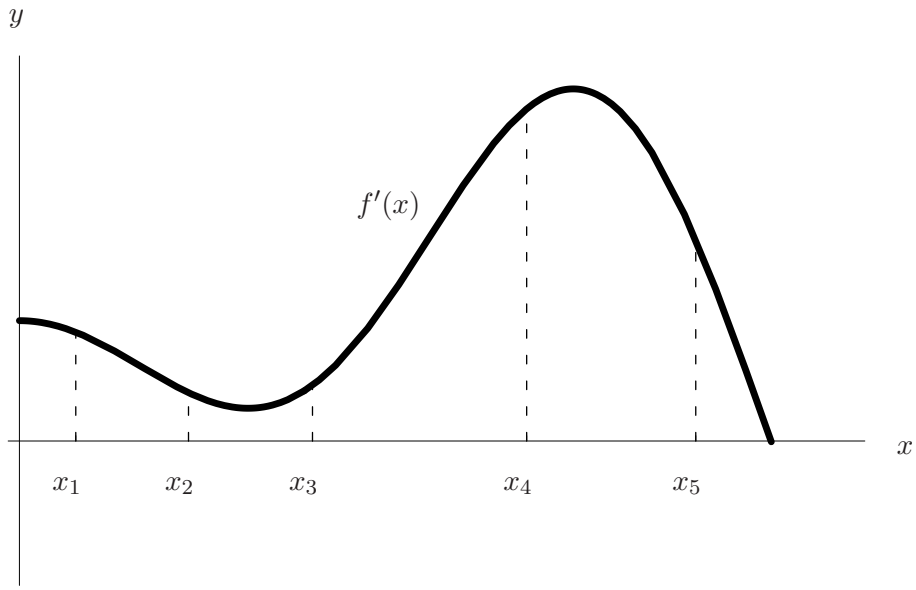
2. (12 points) The graph of the *derivative* function, f', is given below. List all of the marked x-values, if any, from the figure for which the following statements are true. If no marked x-values apply, write "none."



(a) The value of $f(x)$ is greatest x_5

(b) $f''(x) < 0$ x_1, x_2, x_5

(c) f is decreasing none

(d) Slope of f is positive x_1, x_2, x_3, x_4, x_5

(e) The graph of f is concave up x_3, x_4

3. (4 points) This exam will be graded out of 100 points. There are approximately 2000 students taking the exam. When the test has has been graded, there will be a function assigning to each student a score on the exam. Will this function be invertible? Why or why not?

No, this function will not be invertible. Since there are more students taking the exam than possible grades, there will be at least one grade assigned to two or more students. Since we cannot meaningfully assign one output (i.e., one student) to each grade, there can be no inverse function.