

Math 19A
Spring 2023
Extra practice problems
May 12, 2023
Time Limit: 65 Minutes

Name (Print): _____

This exam contains 4 pages (including this cover page) and 1 problems. Check to see if any pages are missing. Enter all requested information on the top of this page, and put your initials on the top of every page, in case the pages become separated.

You may *not* use your books, notes, or any calculator on this exam.

You are required to show your work on each problem on this exam. The following rules apply:

- **Organize your work**, in a reasonably neat and coherent way, in the space provided. Work scattered all over the page without a clear ordering will receive very little credit.
- **Clearly indicate your final answer** by for example circling it.
- **Mysterious or unsupported answers will not receive full credit.** A correct answer, unsupported by calculations, explanation, or algebraic work will receive no credit; an incorrect answer supported by substantially correct calculations and explanations might still receive partial credit.
- If you need more space, use the back of the pages; clearly indicate when you have done this.

Problem	Points	Score
1	20	
Total:	20	

Do not write in the table to the right.

1. This problem concerns the graphs on the last page of this exam.

(a) (10 points) The following figure is the graph of the *derivative* of a function $f(x)$.

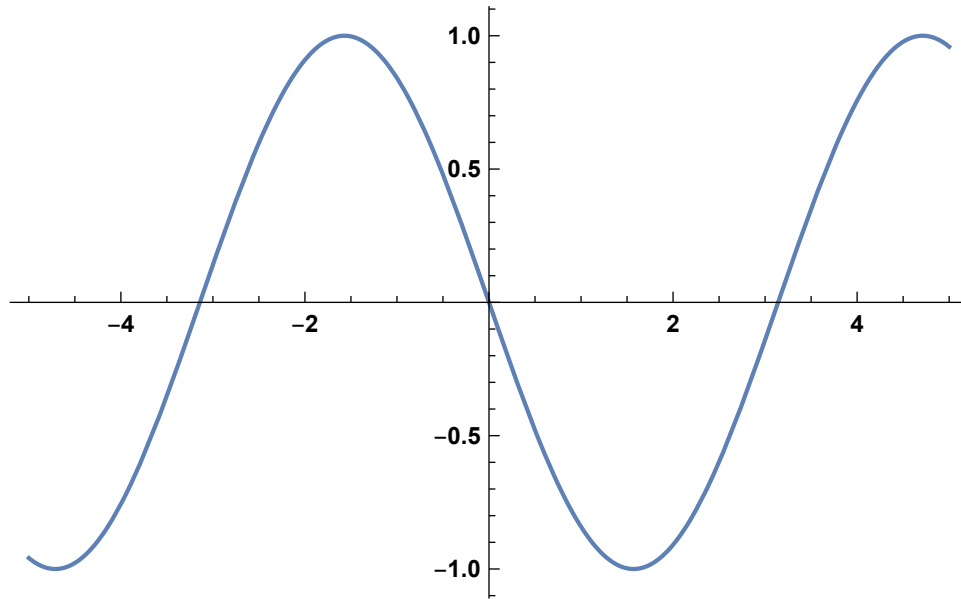


Figure 1: default

Which answer best describes the graph of $f(x)$? A. Graph (1) B. Graph (2)
C. Graph (3) D. Graph (4) E. Graph (5) F. Graph not pictured

(b) (10 points) The following figure is the graph of the *derivative* of a function $f(x)$.

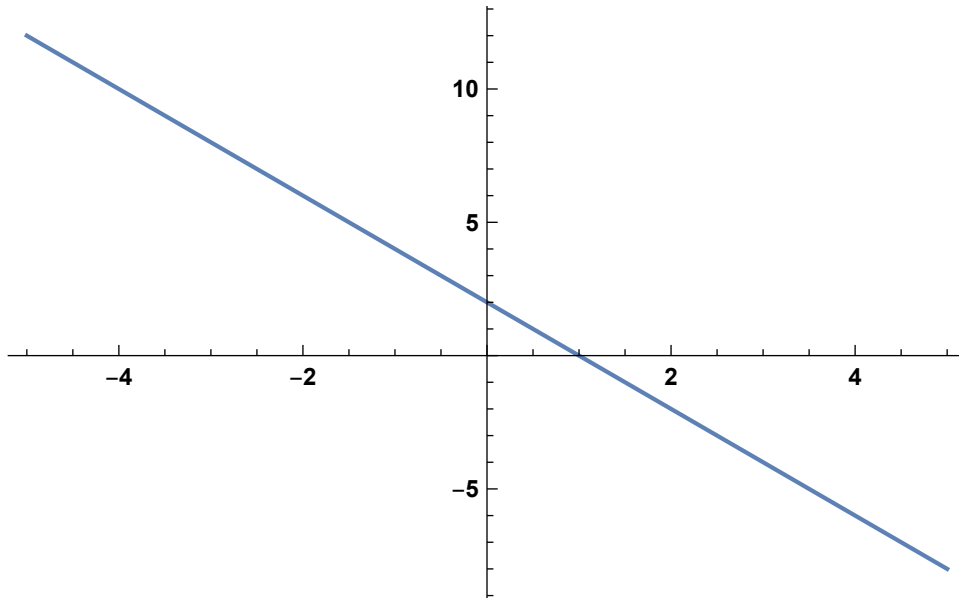
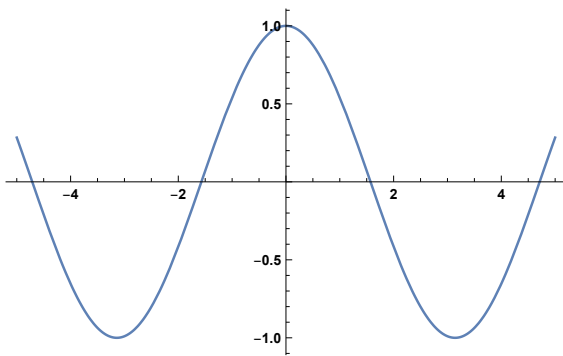
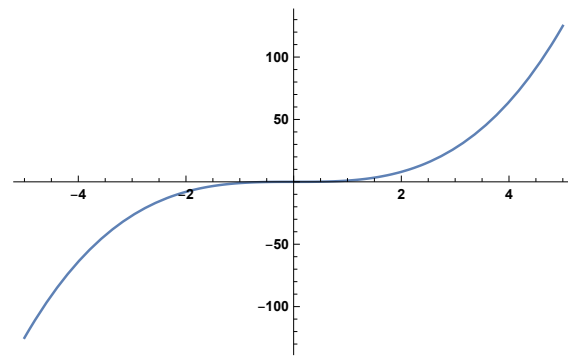


Figure 2: default

Which answer best describes the graph of $f(x)$? A. Graph (1) B. Graph (2)
C. Graph (3) D. Graph (4) E. Graph (5) F. Graph not pictured



(a) Graph (4)



(b) Graph (5)