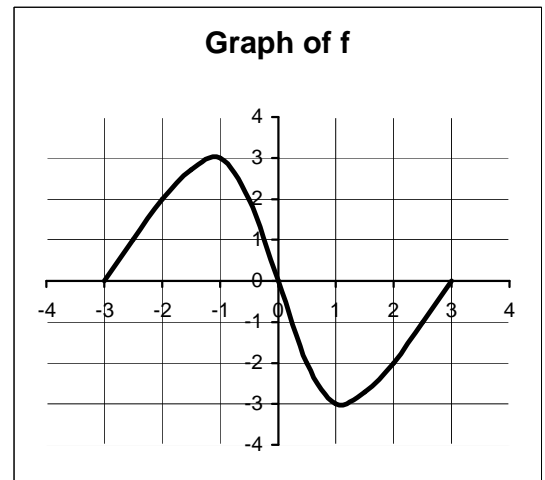


NAME \_\_\_\_\_

Let  $g(x) = \int_{-3}^x f(t) dt$ , where  $f$  is the function whose graph is shown.



- A. Use estimation to evaluate each of the following:
- i.  $g(-3)$       iv.  $g(0)$       vii.  $g(3)$
  - ii.  $g(-2)$       v.  $g(1)$
  - iii.  $g(-1)$       vi.  $g(2)$

- B. On what interval(s) is  $g$
- i. increasing
  - ii. concave up
  - iii. decreasing
  - iv. concave down

- C. Where on the interval  $[-3,3]$  does  $g$  have
- i. an absolute maximum
  - ii. an absolute minimum
  - iii. an inflection point or points

- D. Sketch a graph of  $g$  on the grid provided.

