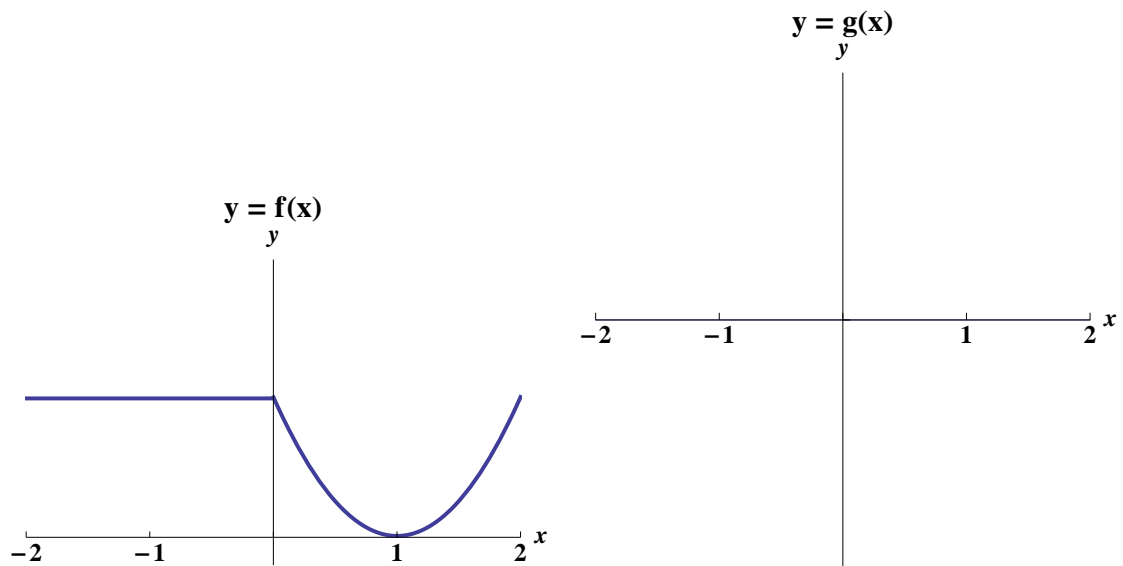


4. [10 points] Given the graph of  $f(x)$ , sketch the graph of  $g(x)$ . Make sure your graph accurately shows the intervals where  $g(x)$  is increasing or decreasing and its concavity.

a. [5 points] Let  $g'(x) = f(x)$  with  $g(0) = 0$ .



b. [5 points] Let  $g(x) = \int_1^x f(t) dt$ .

