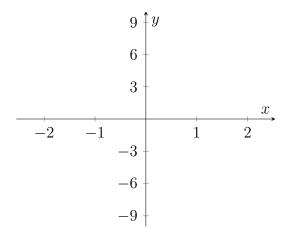
Answer the questions in the spaces provided. Show all of your work and circle the answer you would like to have graded for each question.

Name and section:

- 1. Use the axes below to sketch the graph of a function f such that:
  - (i) the domain of f is [-2, 2],
  - (ii) f is increasing on the interval (-2, 1),
  - (iii) f is constant on the interval (1, 2),
  - (iv) f is concave up on the interval (-2,0), and
  - (v) f is concave down on the interval (0,1).



2. Find the domain of the function  $g(x) = \frac{x}{x^2 + 4}$ ; compute g(0) and g(-2).