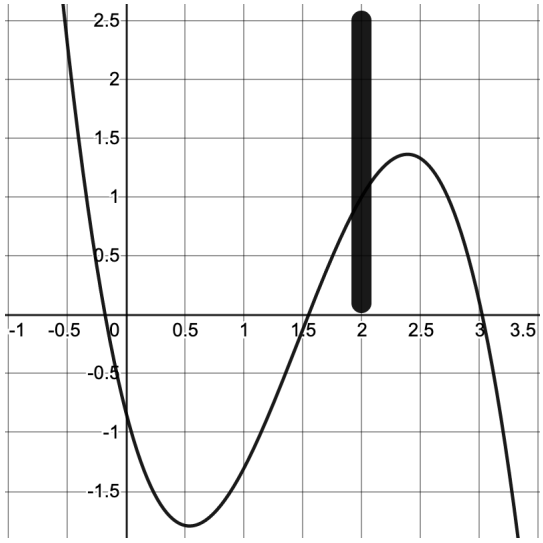
Part I (due at the beginning of class Monday, September 8)

For this Part I, just answer the questions below:

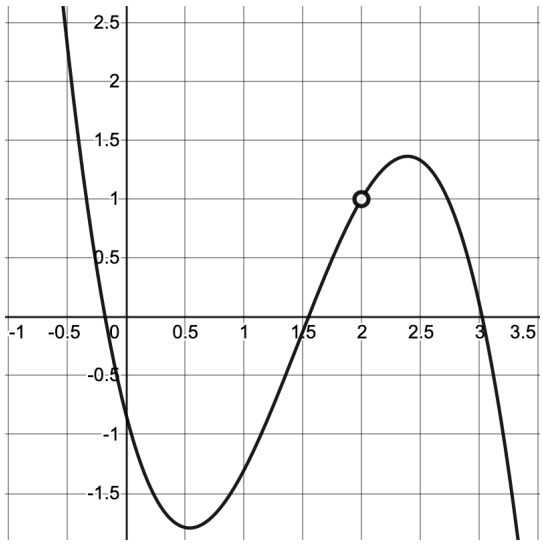
1. When graphing the function below, the graphics card failed and part of the function did not render properly, so we cannot see what is happening with the function in a neighborhood around $x = 2$.



   (a) Suppose you're an ant crawling along the function to the left of the missing portion but headed toward the missing portion, i.e., climbing up and to the right as you go toward the black blob. What y-value are you approaching?

   (b) Now suppose you're coming from the right of the missing portion, i.e., climbing down and to the left as you approach the black blob. What y-value are you approaching?

2. Now suppose we fixed our graphics card issue and we see that the graph of the function looks like this:



   (a) What is the value of $f(2)$ for this function?

(b) What y-value are you approaching if you move toward $x = 2$ from the left?

(c) What y-value are you approaching if you move toward $x = 2$ from the right?

Recall, what you turn in for Part I should have 3 subparts, as mentioned in the syllabus:

(a) Your responses to the reading questions.

(b) Your own questions/comments on the reading.

(c) The amount of time you spent on Part I (including the time spent reading/watchinh).

Part II: WeBWorK (due Saturday, September 6, by 11 PM)

Click here for your WeBWorK assignment. Complete the DW 3 WeBWorK assignment. Remeber that your username and password are *both* the last five digits of your ID until you change your password.

Part III: Homework Problems (due Wednesday, September 10 at the beginning of class)

Review the homework guidelines and the sample homework in the syllabus to ensure that the solutions you turn in meet the guidelines.

1. True or False: If an object moves with the same average velocity over every time interval, then its average velocity equals its instantaneous velocity at any time. Carefully explain your answer.