

Name:

Problem 1: Consider the rational function given by the following rule:

$$f(x) = \frac{x + 1}{x^2 - x - 2}.$$

- a) Does this function have a horizontal asymptote on the *right*? If so, please give its equation. To receive credit for this question, you must use the steps outlined in class or a similar technique.

- b) What limit would you write to compute the asymptote on the *left*? Please write the limit but do not compute the asymptote.