Math 19: Quiz 2   Name:

For full credit you must show your work. Partial credit may be given for incorrect solutions if sufficient work is shown.

For both questions, use $+\infty$ or $-\infty$ if appropriate. Justify your answers, i.e. by using "really big/small" terminology.

1. Determine the following limits. (4 pts)

$$\lim_{x \to 1^-} \frac{2x+3}{x-1} =$$

$$\lim_{x \to \infty} \frac{2x+3}{x-1} =$$

2. Find the horizontal and vertical asymptotes of f. (6 pts)

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