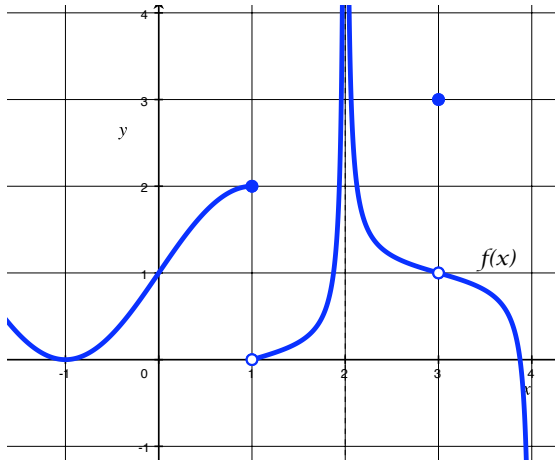


Math 151 Quiz #2  
October 7, 2008

Name: \_\_\_\_\_

Show all work.

1. (3 pts.) Evaluate the following. If a limit is infinite, determine if it is  $+\infty$  or  $-\infty$ .



(a) (1 pt.)  $\lim_{x \rightarrow 2^+} f(x)$

(b) (1 pt.)  $\lim_{x \rightarrow 3} x^2 f(x)$

(c) (1 pt.)  $f(3)$

2. (4 pts.) Evaluate the following limits. **Show work or justify** your answers\*. If the limit is infinite, determine if it is  $+\infty$  or  $-\infty$ .

(a) (1 pt.)  $\lim_{x \rightarrow 2} \frac{3x - 1}{x + 1}$

(c) (1 pt.)  $\lim_{x \rightarrow 0^+} \csc x$

(b) (2 pts.)  $\lim_{t \rightarrow -2} \frac{2t + 4}{t^2 + 3t + 2}$

3. (3 pts.) Write all of the **equations** of the vertical asymptotes of  $g(x) = \frac{x^2 - 6x + 9}{x^3 - 9x}$ .

\*Note: Do not justify by using graphs or tables.