

Name: _____

Math 124 Worksheet #3
October 5, 2007

1. Evaluate the following limits.

(a) $\lim_{x \rightarrow -\infty} \frac{x+1}{3x^5-2x+5}$

(b) $\lim_{x \rightarrow \infty} \frac{\sqrt{9x^2+x}}{2x-5}$

2. Find the horizontal and vertical asymptotes of the curve $y = 2 + e^{3/x}$.

3. If the position of a rabid squirrel is given by $s = 15 - \frac{2}{t^2}$ in feet at t seconds, what is the velocity of the squirrel at 1 second?*

*Note: You should be running at least this fast at 1 second to avoid the squirrel.