Math 223 Quiz # 3	Spring 97–Sec. 11 Alberto Corso	Name: _____ _____	Please, be neat and show all your work; circle your answer.

1. Find the indicated limits:

   $\lim_{x \longrightarrow 0} \sqrt{x + \frac{1}{x^2}} =$ _____;

   $\lim_{x \longrightarrow \infty} \frac{x}{x^2 + 5} =$ _____;

   $\lim_{x \longrightarrow \infty} \frac{x^2 + 5}{x} =$ _____.

pts: /6

2. Determine all vertical and horizontal asymptotes of the graph of

$$f(x) = \frac{2x - 3}{1 - x}$$

   and sketch the graph of the function.

pts: /4

grade: /10