

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

Section: \_\_\_\_\_

**Math 120 C, E**

**Quiz 4**

**November 4, 2004**

Show all work for full credit.

1. (5 points) Find the linear-to-linear rational function  $f(x)$  whose graph has  $y = -3$  as its horizontal asymptote,  $x = 5$  as its vertical asymptote, and which passes through the point  $(0, 2)$ .

2. (5 points) Give the zeros and asymptotes of the function

$$g(x) = \frac{(3x + 3)(2x - 1)}{2x^2 - 9x - 5}$$