

## Assignment #6

Name \_\_\_\_\_

**Due 30 October 2009**

1. Let  $f(x) = \frac{x}{1+x^2}$ . Use the definition of the derivative to find  $f'(x)$ .

2. The graph of  $f$  is given below. State, with reasons, the point(s) at which  $f$  is not differentiable. Sketch the derivative of  $f$ .

Figure 1: The graph of  $f$

