Math 210, Groves, Quiz 4 Thursday, September 2, 2011, 12pm.

Name: _____

Please write clearly and show all of your work.

1. Consider the following three points in \mathbb{R}^3 :

P = (0, -2, 1), Q = (1, 4, 2), R = (2, 0, 3).

Find the equation of the plane which contains P, Q and R.

2. Determine whether or not the following limit exists. If it does, find its value, if it doesn't, explain why not.

$$\lim_{(x,y)\to(0,0)}\frac{x-y}{x+y}.$$