## Math 3298 Worksheet 6: Limits of scalar functions of two variables

Group members (2 to 4):

Find the limit if it exists, or show that it does not exist.

(1) 
$$\lim_{(x,y)\to(0,0)} \frac{2xy}{\sqrt{x^2+y^2}}$$
.

(2) 
$$\lim_{(x,y)\to(0,0)} \frac{y^4}{x^4 + 3y^4}$$