

Math 3298 Worksheet 5: 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) $\lim_{(x,y) \rightarrow (0,0)} \frac{2xy}{\sqrt{x^2 + y^2}}.$

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