

MATH 102 – Quiz 5

April 3rd

Full name: _____

Student ID: _____

Problem. Find the following limits or show that they do not exist

(a) $\lim_{(x,y) \rightarrow (0,0)} \frac{y^4 - 2x^2 + xy^2}{y^4 + x^2}.$

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

[Grade: 5+5 points]