MATH 243: SECTION 14.2 GROUPWORK

(1) Find the limit, or explain why it does not exist:
$$\lim_{(x,y)\to(0,0)} \frac{x^2y - xy^2}{x^2 + y^2}.$$

(2) Determine where the function $f(x, y) = \ln(x^2/y)$ is continuous.

(3) Find $h(x, y) = g(f(x, y))$, and determine where $h(x, y)$ is continuous, where $g(t) = 1/t$ and $f(x, y) = x^2 - y^2$.