Quiz 1

Name: _____

1. Find and sketch the domain of function $f(x, y) = \sqrt{2x - y}$. Show your work.

2. Find $\displaystyle\lim_{(x,y)\to(0,0)} \frac{x^2 - y^2}{x^2 + y^2}$, if it exists, or show that the limit does not exist.