(1) Let $f(x, y) = \ln(x + y - 1)$.
   
   (a) Find and sketch the domain of $f$.
   
   (b) Find the range of $f$.

(2) Find the level surfaces of $f(x, y, z) = y^2 + z^2 - x^2$.

(3) If $f(x, y) = \frac{6x^2y}{2x^4 + y^4}$, does the limit $\lim_{(x, y) \to (0, 0)} f(x, y)$ exist? Justify your answer.