

**MA 122: Reading Assignment 10**

Read Section 15.1

Let  $f(x, y) = x^2 + xy + y^2$ . The function  $f$  has a critical point at  $\mathbf{a} = (0, 0)$ . Without using either a graph or the second derivative test, explain how you can tell that  $(0, 0)$  is a minimum of  $f$ .