## Section 14.4 Worksheet:

a. How is the tangent plane for a bivariate function analogous to the tangent line in the univariate case?

b. How are the tangent equations analogous in the same situation noted above?

c. Approaching from two directions and finding the same limit does not guarantee that a limit exists. If partial derivatives  $f_x$  and  $f_y$  are exist around (a, b) and are continuous at (a, b), what can we conclude?

d. Draw a tangent plane approximation to a bivariate function of your choice at a point.