Section 29.1: Functions of Two Variables

up until now, we've been looking at functions of one variable only

what about 2 variables?

$$f(x,y) = x^2 + y^2$$

$$f(r, \theta) = r \sin \theta$$

in fact, you've been using these for quite some time in non-calculus-based applications:

$$V = \pi r^2 h$$ where V is a function of both r & h