Section 29.1: Functions of Two Variables

January-23-17
1:24 PM

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

$V = \pi r^2 h$ volume of cylinder where V is a function of both r and h

example: if $f(x, y) = x^2 + y^2$, find $f(2, 3)$

$$f(2, 3) = 2^2 + 3^2 = 13$$