

MATH 231: Calculus of Several Variables
Section 1, 107 Ag Sc & Ind Bldg,
TR 9:05 AM - 9:55 AM

Homework 14: Due Tuesday, Oct 29

Be sure to read the notes before attempting these problems. The examples there are a little more advanced than the one seen in class.

1. Find the (i) domain and (ii) range. **Graph both.**

(a) $f(x, y) = x - y$

(b) $f(x, y) = \sqrt{y^2 + 1}$

(c) $f(x, y) = |xy|$ (this is just absolute value.)

2. Graph the level curves for the following functions. Describe in words or with a picture what the three dimensional surface should look like.

(a) $f(x, y) = x - y$

(b) $f(x, y) = \sqrt{y^2 + 1}$

(c) $f(x, y) = |xy|$ (this is just absolute value.)