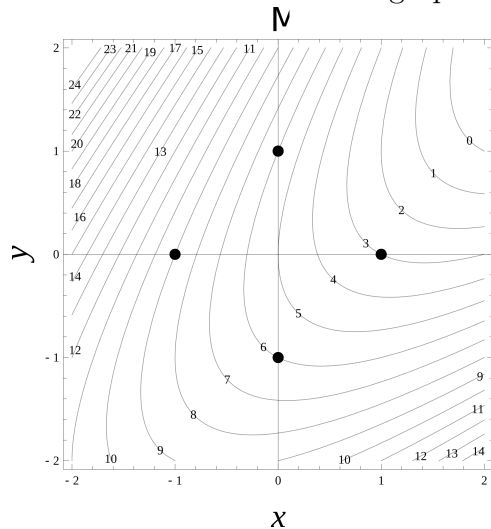


**Student handout** This is a graph of the function  $f(x, y)$ :



1. Find the derivative of this function.
2. Find the derivative of this function at the leftmost of the indicated points.
3. Find the partial derivative of this function with respect to  $x$  at the leftmost of the indicated points.

## 1 Instructor's Guide

This activity is a set of SWBQ questions about finding a partial derivative from a contour graph. Show the contour graph and then ask, in an appropriate order depending on student responses:

1. Find the derivative of this function.
2. Find the derivative of this function at the leftmost of the indicated points.
3. Find the partial derivative of this function at the leftmost of the indicated points with respect to  $x$ .

### 1.1 Student Conversations

See the comments in the solution to the Student Handout.