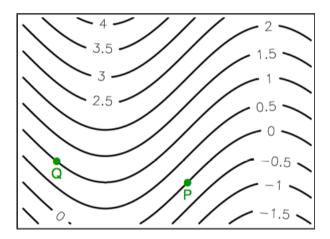
Math 20C – Swanson – Fall 2019 Homework 6 Due Tuesday, 11/12/19 at 11:59pm

- The graded part of the homework is on WebAssign.
- The problems below are also assigned and you are responsible for doing them, but they will not be collected or graded.

1. The contour plot of z = f(x, y) is below.



- (a) Draw the path of steepest ascent starting at point P.
- (b) Draw the gradient vector at point Q.
- (c) What are the signs (positive, negative, or zero) of  $D_{\hat{i}}f$  and  $D_{\hat{j}}f$  at point P? At point Q?