Lesson 9 (Convexity) Determine if the following functions are convex in the following way:
   (i) Plot the contours of the function.
   (ii) Plot the value of the function along a line segment in the domain of the function.

(a) $f(x_1, x_2) = x_1 + x_1 x_2 + x_2^2$

(b) $f(x_1, x_2) = x_1^2 + x_1 x_2 + x_2^2$