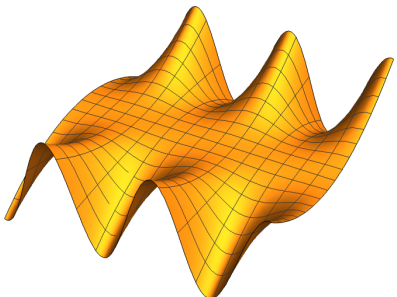
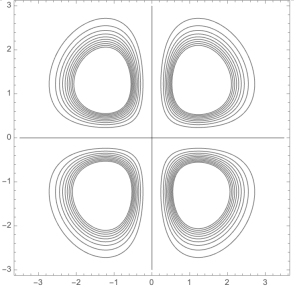
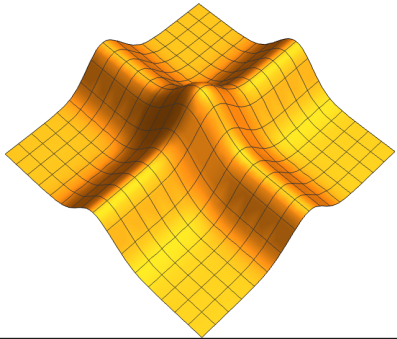
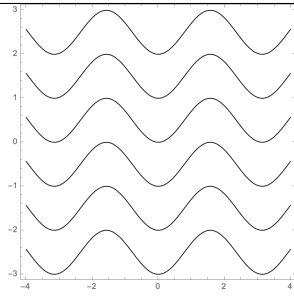
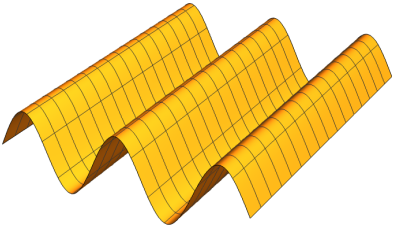
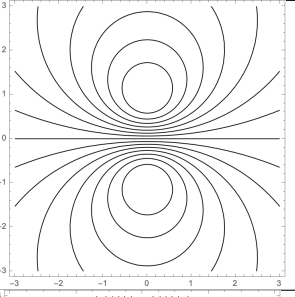
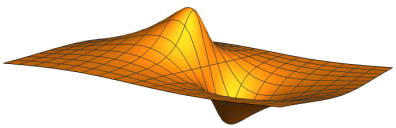
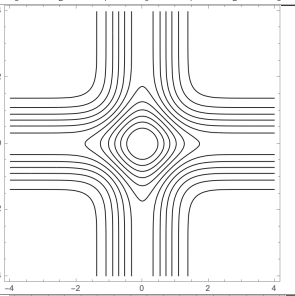
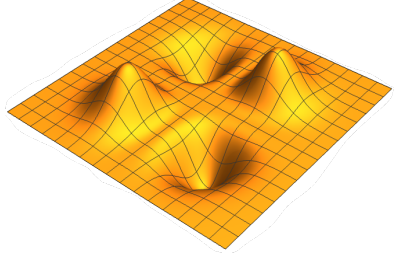
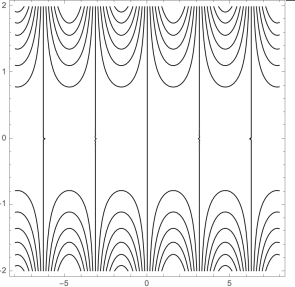


1. [10 pts] Consider the following table of functions $f(x, y)$, their graphs, and their level curves. On the following page, fill out the table provided by matching the functions with their graphs and level curves.

(a) $x^3 y^3 \exp(-x^2 - y^2)$	(A) 	(I) 
(b) $\frac{-10y}{x^2 + y^2 + 1}$	(B) 	(II) 
(c) $\cos(x)^2 + y$	(C) 	(III) 
(d) $y^2 \sin(x)$	(D) 	(V) 
(e) $e^{-x^2} + e^{-y^2}$	(E) 	(VI) 

By filling in the table below, correctly match these functions, graphs, and level curves.

Function	Graph	Level Curves
$x^3 y^3 \exp(-x^2 - y^2)$		
$\frac{-10y}{x^2 + y^2 + 1}$		
$\cos(x)^2 + y$		
$y^2 \sin(x)$		
$e^{-x^2} + e^{-y^2}$		