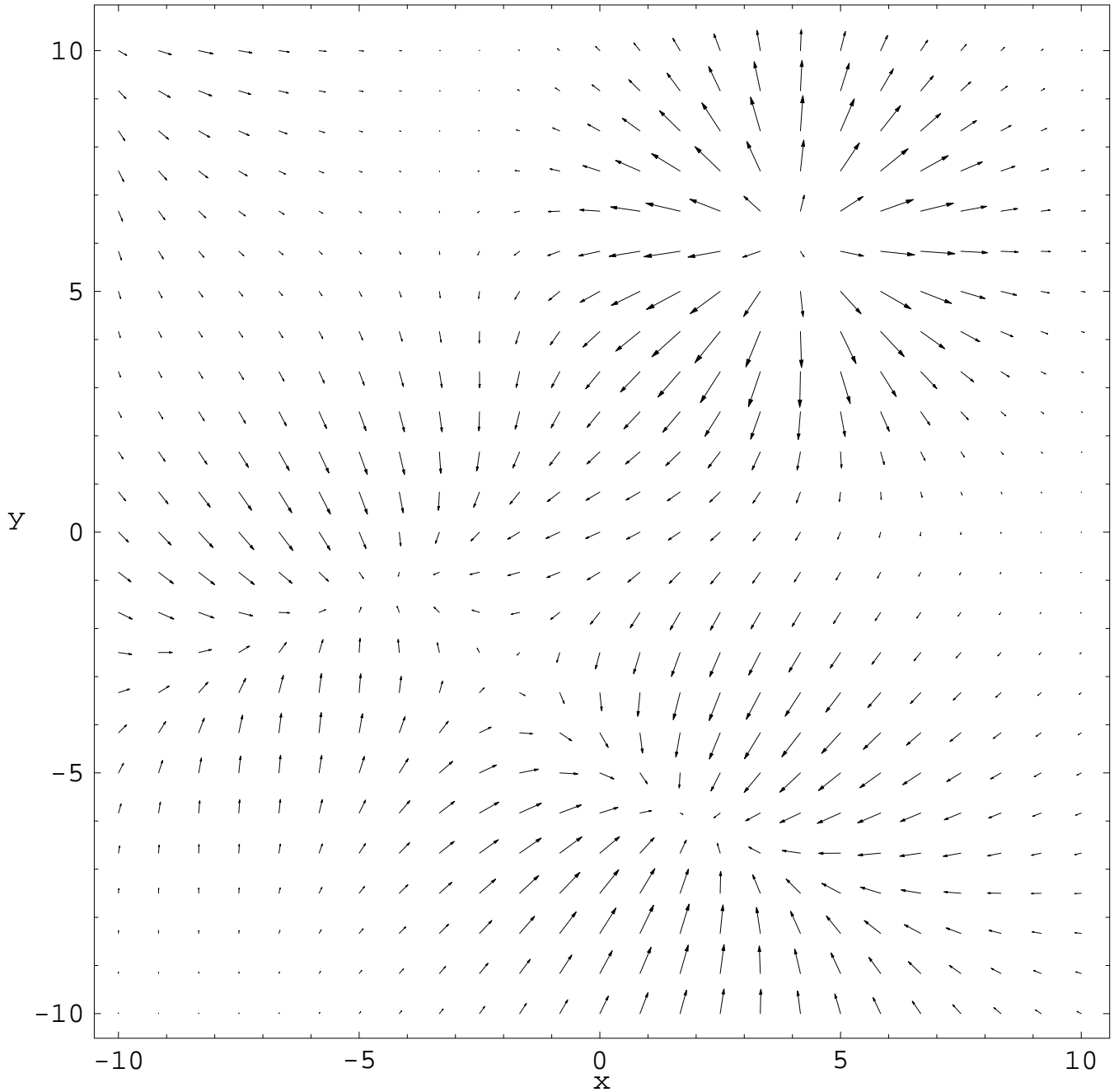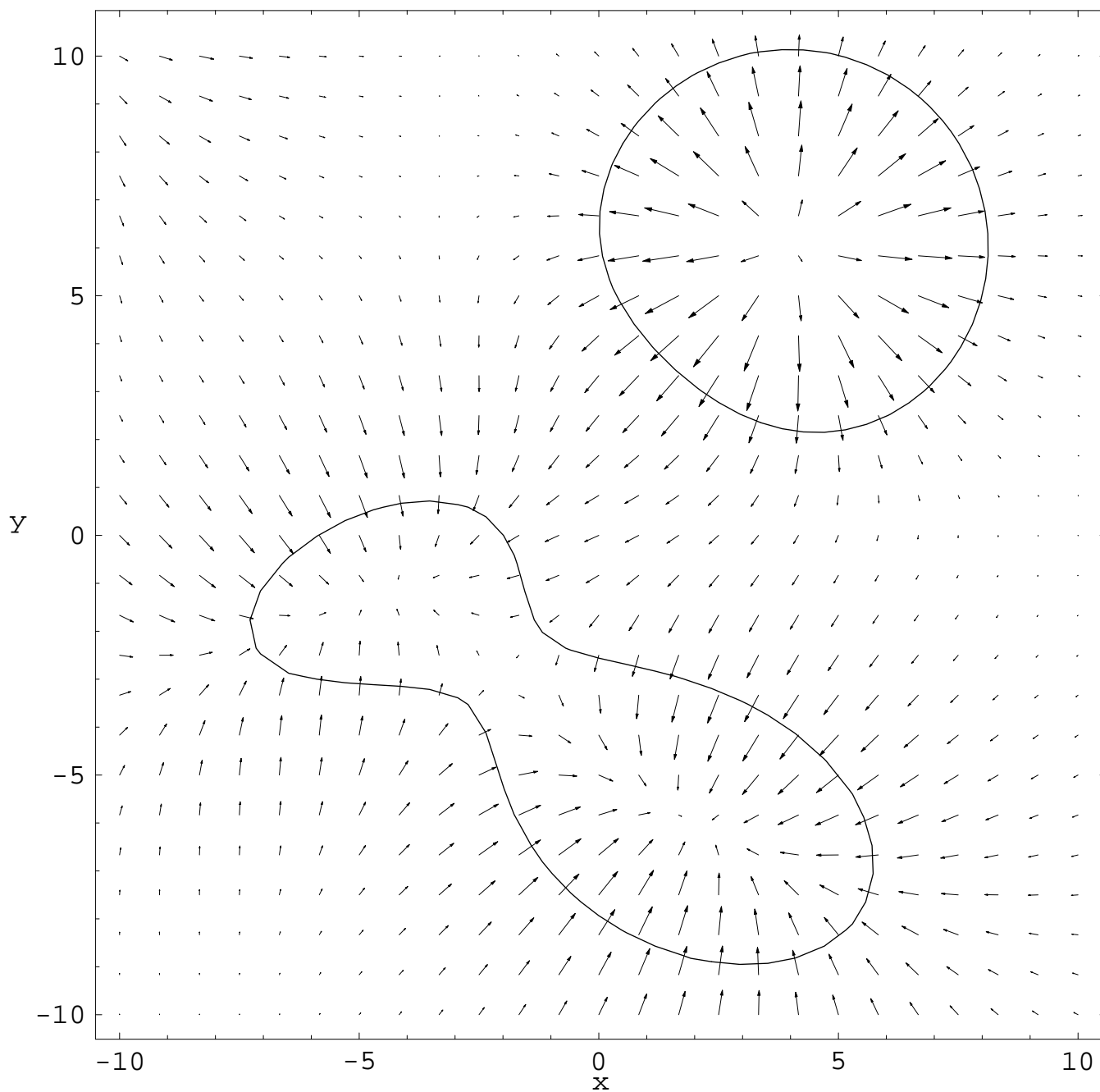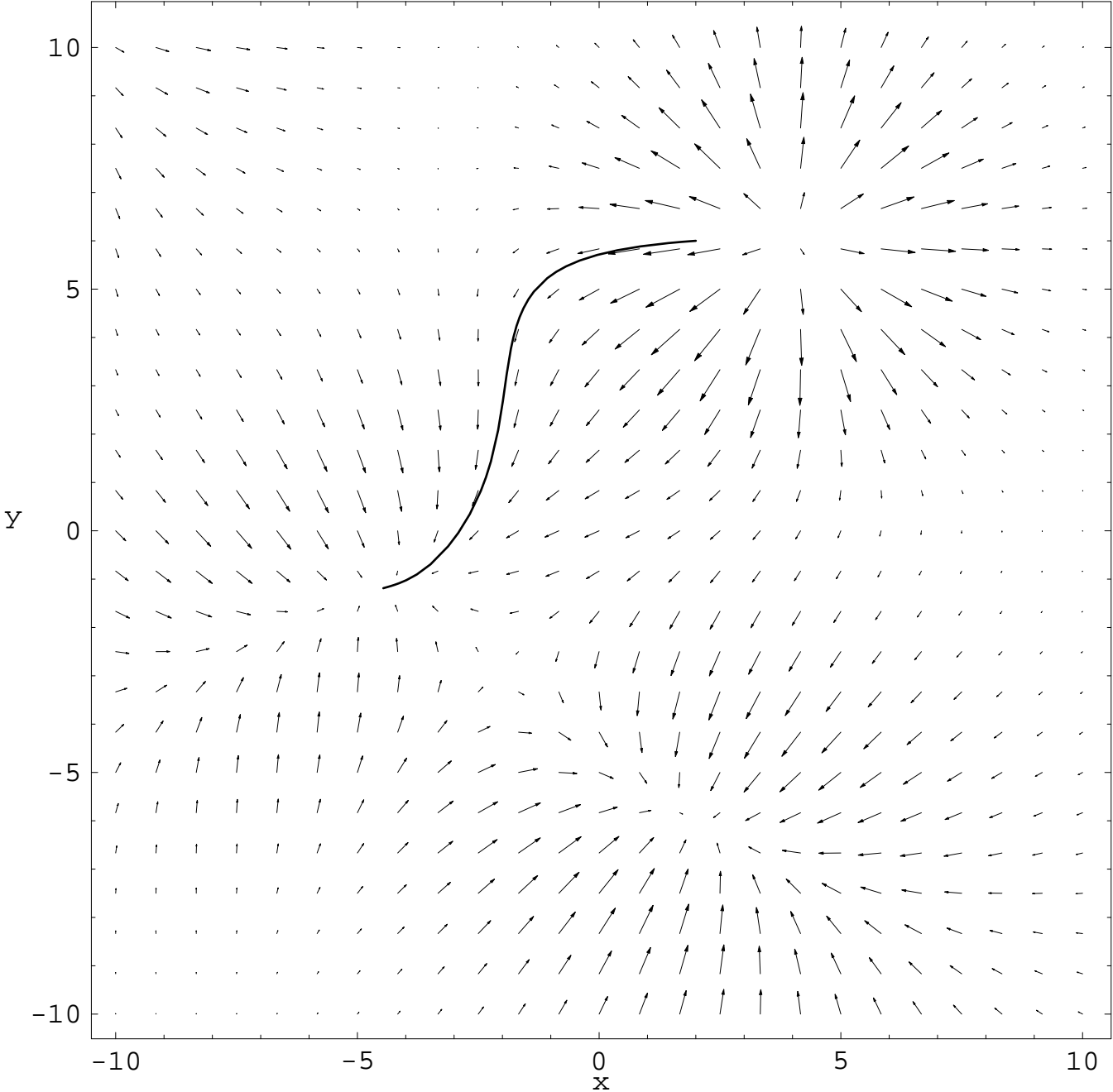# Section 18.3, Problem 27

Here is a better picture of the gradient vector field for the problem. You might want to print only this first page and then sketch in the level curves and path of steepest ascent as detailed in the problem before you look at the figures on the next three pages.

The level curves through the two points $(5, -5)$ and $(8, 5)$ are shown in this figure.

The next figure shows the path of steepest ascent starting at $(2, 6)$. Note the similarity to the solution drawn on the board in class.

Finally, here's a look at a graph of the function.