

### Homework Set 8

DUE: MARCH 25, 2019 (AT THE BEGINNING OF CLASS)

**To be handed in**

*Please write your solutions to Problem 1 on a single sheet of paper!*

1. Find the slope of the tangent line to the curve  $(x^2 + y^2)^2 = 4xy$  at the point  $(1, 1)$ .  
Hint: Consider  $y = y(x)$  as a implicitly defined function of  $x$  near this point.

3. Textbook (5th edition) Section 3.5, Exercises 1-9, 37-40

4. Textbook (5th edition) Section 3.6, Exercises 21-28