## Math 240A Fall 2015 Homework Assignments

## Home Work # 1 due Thursday, Oct. 1

Read Chapter I, also Appendix A if you haven't taken topology course.

Page 29, #1.1, 1.3, 1.7

Consider  $M = \{ (x, |x|) \mid x \in \mathbb{R} \} \subset \mathbb{R}^2$  with its subspace topology. Show that M is a smooth 1-dimensional manifold.

## Home Work # 2 due Thursday, Oct. 8

Page 30, #6 Page 48, #1, 3, 5, 10