

Math 295 - Fall 2020
Warm up 2.2
Due before class on Monday September 16

Please turn in this assignment on Gradescope.

Problem 1 : (Objective A11) Look up the definition of neighborhood in *Complex Variables* by Bowman and the definition of open disk in *A First Course in Complex Analysis* by BMPS. What do you notice?

Problem 2 : (Objective A11) Look up the definition of open set given in *Complex Variables* by Bowman and the one given in *A First Course in Complex Analysis* by BMPS. Show that they are the same.

Problem 3 : (Objective A12) Can an interior point of a set also be a boundary point?

Problem 4 : (Objective A13) Draw a picture of a set in the complex plane that is connected. Draw a picture of a set in the complex plane that is not connected.

Problem 5 : (Objective A14) Draw a picture of a set in the complex plane that is bounded. Draw a picture of a set in the complex plane that is unbounded.