Preparation sheet for Test 1

Problems on this Test will be based on the homework problems listed below. Note that a problem on the Test may combine concepts of more than one problems listed on this sheet, or it may use only part of the solution of a given homework problem.

When preparing for the Test, it will be beneficial for your performance if you redo the problems listed below, and also review the related examples in the notes and in the book. Please note: It will not help you much if you simply browse those problems without actually doing them.

The standard disclaimer applies:
This list of problems is not meant to be exhaustive. Rather, it is meant only to help you pay special attention to specific concepts. As for any test, you are expected to know all concepts that have been covered in the course, unless it is noted otherwise below.

Note:
You may prepare and use one double-sided sheet with formulae.

Topics and Related HW problems

- Polar form $re^{i\theta}$ of a complex number; relation between polar forms of a number and its complex conjugate.
  
  HW 2, ## 6, 7; HW 3, # 5.

- HW 2, ## 3, 4. Know the definition of an Apollonius circle.

- Basic facts and constructions from Elementary Geometry.
  
  HW 4, ## 5, 6.

- (i) Equations expressing facts that given triangles are similar or equilateral, or quadrangles are squares. (ii) A formula relating the vertices in a parallelogram. (iii) Definition and properties of $\omega$.
  
  HW 2, # 1; HW 3, ## 1(iii), 7; HW 5, ## 2, 4, 5.

1\text{E.g., ‘HW 2, #7’ means ‘Problem 7 from HW 2’ and not a ‘# 7’ from the text book mentioned in HW 2.}