

Assignment 3

Oral questions

1. 2.4/16
2. 3.2/9

Questions to be answered in writing

1. Assume that the distance of the points O_1 and O_2 is d . Draw a circle of radius r_1 around O_1 and a circle of radius r_2 around O_2 . Express, in terms of equations and inequalities for r_1 , r_2 and d , necessary and sufficient conditions for the two circles to have 0, 1 or 2 points in common. (You do not have to prove your claims, but you have to consider all possibilities, including one circle containing the other one.)
2. Provide an example showing that (SSA) does not set up a congruence of triangles. Define a smaller class of triangles for which (SSA) does imply congruence. (Make a restriction on the angles considered, you do not need to formally prove your statement.)