Nina Smeenk 366480
Martha Karpeter 367847

Exercise Sheet 6

Exercise 1

Polarizing the statement in the exercise will yield the following:

Consider a non-deg., non-empty Conic in RP^2, four points t_A, t_B, t_C, t_D on the conic and their corresponding tangents A, B, C, D.

Define the lines $P = \overline{t_A t_B}, Q = \overline{t_B t_C}, R = \overline{t_C t_D}, S = \overline{t_D t_A}$.

Then the four points $PR = P \cap R, QS = Q \cap S, AC = A \cap C$ and $BD = B \cap D$ are collinear.