## Conics

Given two conics and three point where they intersect, the question is:
how to find the fourth intersection point as the intersection of two lines.


Let $A, B, C$ be three intersection points of two conics
Let $D$ and $E$ be the polars of the line $A B$ with respect to the conics
With $F$ the intersection of $B C$ and $D E$ and $G$ intersection of $A C$ and $D E$ then the fourth intersection point of the two conics
is the intersection of $A F$ and $B G$.

