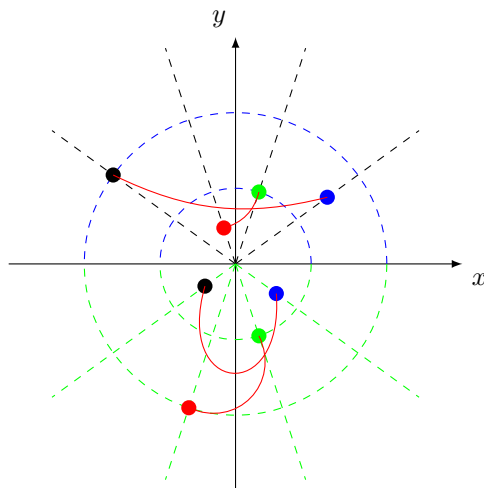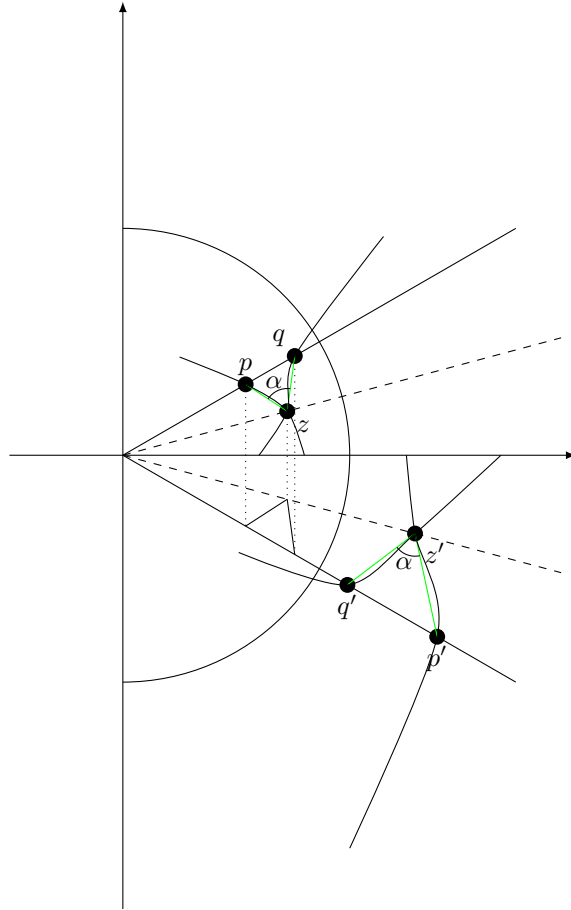This is an inversion of two intersecting curves, in polar form. Note that due to this being a draft, I used imprecise curves to convey a point, without intense care being taken in regard to numeric accuracy. This is overcome for specific diagrams by using specific curves, which allow us to mathematically determine the others with precision.

This is an inversion of an angle between two intersecting curves. Note that the curve from p' to z' is on the wrong side of the green secant line. For a non-draft, I would define a precise parametric curve or something.

It is straight forward that

$$\angle pzq = \angle p'z'q'$$

and this holds under the limit