# Assignment 2

## Conic sections and special curves

1. Construct an ellipse when the distance of its focus from the directrix is equal to 50 mm and its eccentricity is 3/4.
2. Draw a parabola whose focus is at a distance of 50 mm from the directrix.
3. Construct a conic when the distance of its focus from the directrix is equal to 50 mm and its eccentricity is 3/2. Name the curve after plotting it.
4. Draw a cycloid generated by a point P on the circumference of a circle of diameter 60 mm when the circle rolls along straight line.
5. Draw an involute of a circle of 35 mm diameter.