

In this thesis we look at coordinates, that are obtained from GPS, commonly used geodetic coordinates and the ways to transform them. First, we find formulas for transformation from geodetic coordinates to Cartesian coordinates. These formulas are solved as system of equations. For that we use a couple of numeric methods. As a result, we get instructions on how to transform coordinates from one system to another. Further, we are introduced to GPS, how to approximate shape of the Earth and how to transform the surface of the Earth to map.