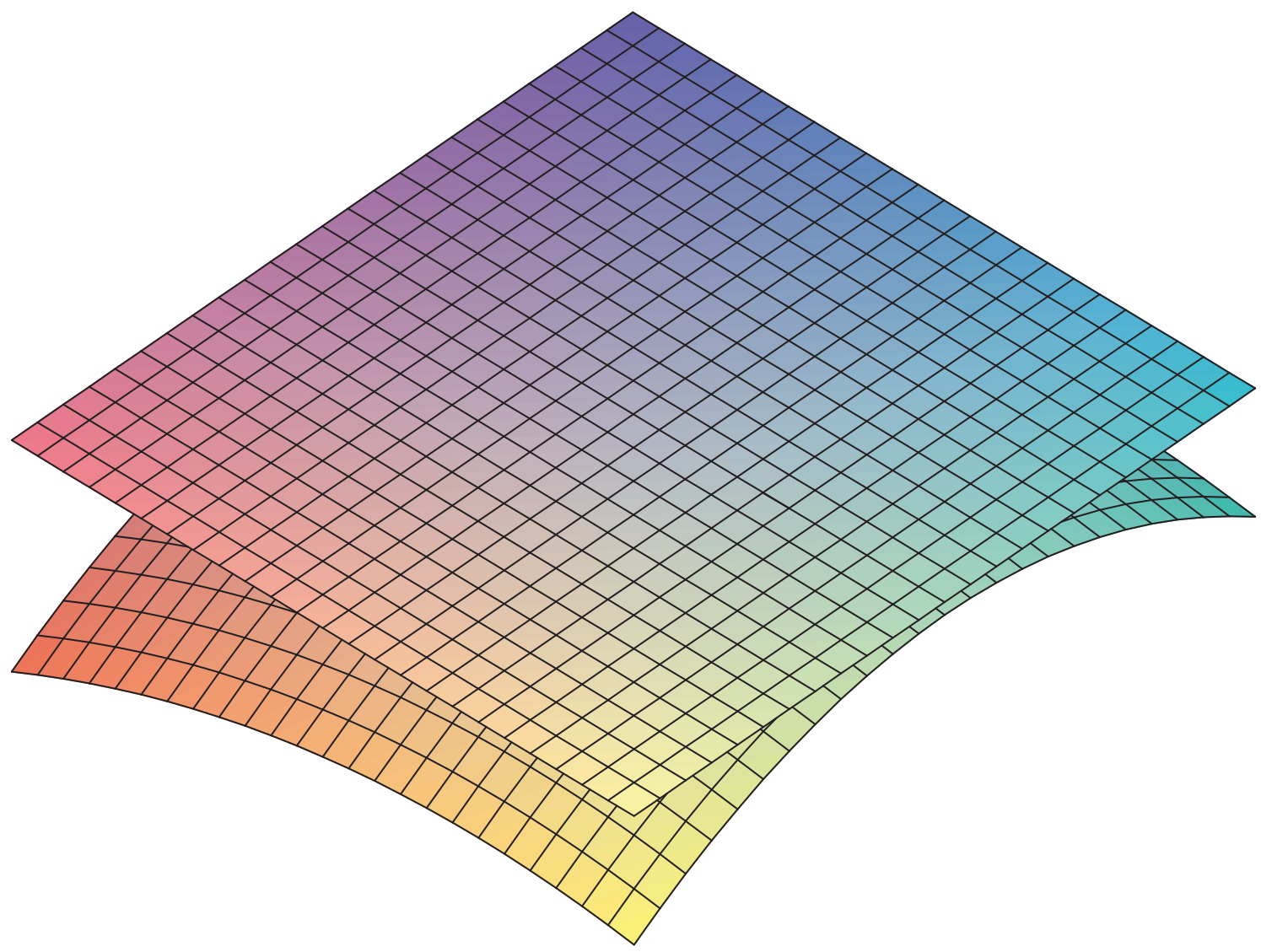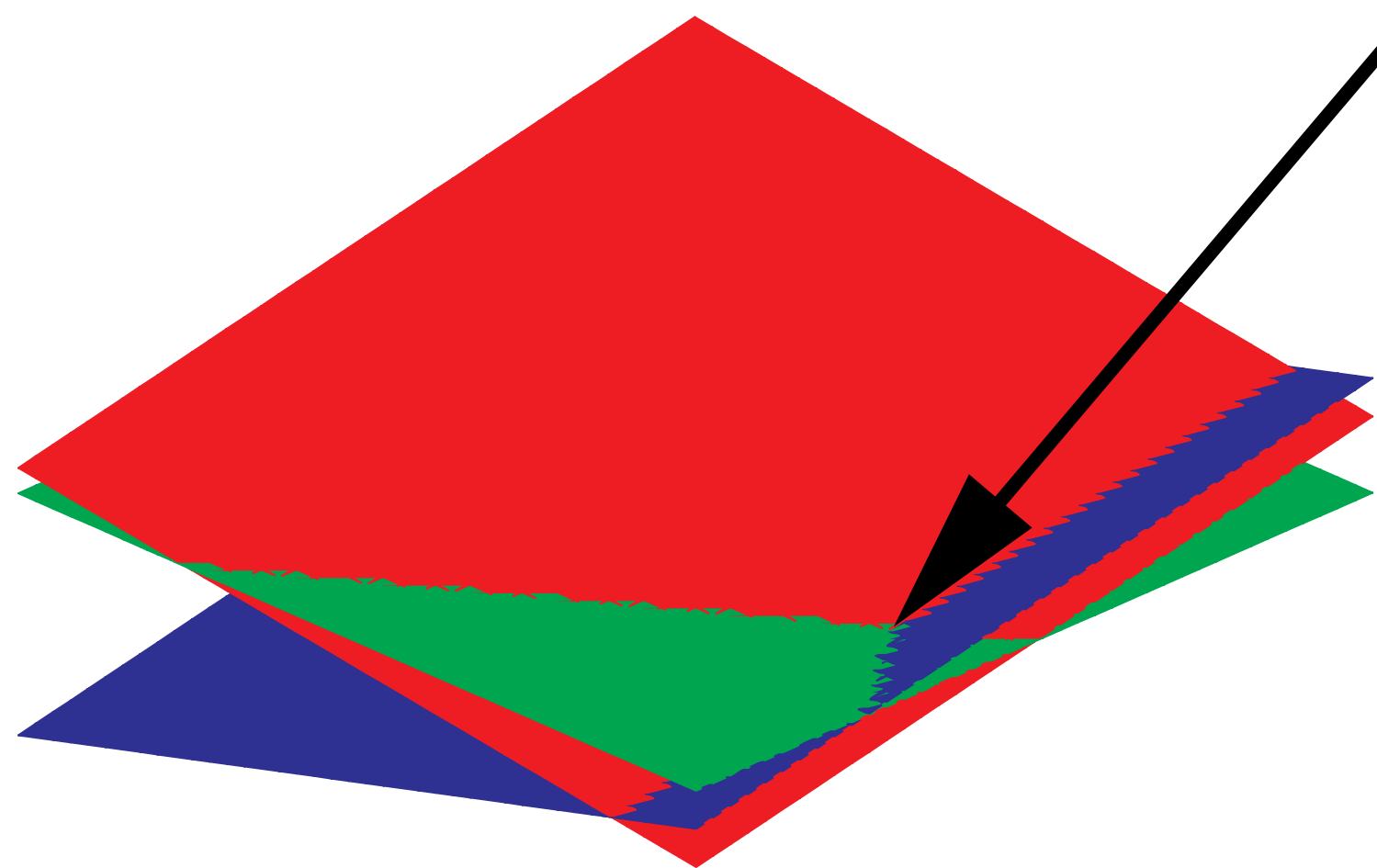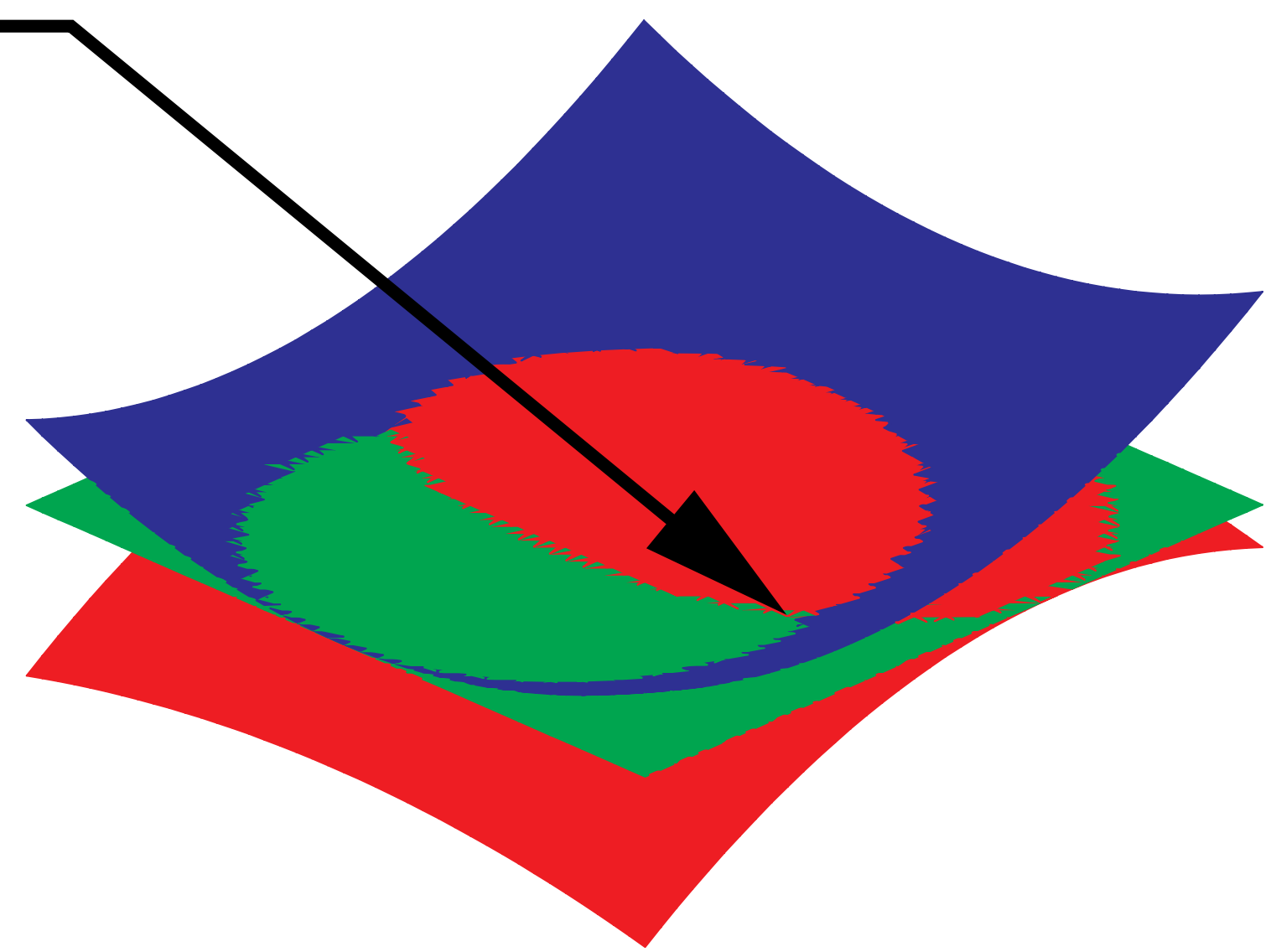# Geometrical interpretation of Newton's method in 2 dimensions

A surface can be approximated in a neighbourhood of a point by the plane tangent to the surface at that point.

The **intersection** *of the two surfaces with the xy-plane can be approximated by*

the **intersection** *of the planes tangent to the surfaces with the xy-plane.*