1969

1969-1. An embedding of a torus into $\mathbb{R}^3$ is given. Can it have nontrivial (at least infinitesimal?) isometric deformations? *The question is connected with small denominators, taking into account the dynamical system defined by the asymptotic lines on the parabolic curve. This system itself is worth examining.*

1969-2. Given a function in the plane (a germ at 0), is it possible to find a function, that is smoothly equivalent to the given function, and is the Gaussian curvature function of (a germ of) a surface $z = f(x,y)$ in $\mathbb{R}^3$? *Can merely the original function in the plane be itself realized in this form*? *The answer may depend on the singularity at* 0: *for example, it may happen that finite multiplicity,* $\mu < \infty$, *is required.*