Durham University, Anna Felikson Michaelmas 2015

Riemannian Geometry, Hints 1

1.1 Consider a "direct product atlas" (with charts being direct products of charts on M and N.

1.2 Look at the shape of Γ near the point $p = (0, 0)$.

1.3 The computation is rather similar to it's one dimensional analogue (see Example 1.2 in the lectures).

1.4 Cover the square (the cube in case of 3-torus) by smaller squares (cubes).