Manifolds, V2018

Problem sheet 4, to be discussed on Monday the 19th February 2018.

Problem 1. Tu, Problem 9.7.

Problem 2. Let a, b be real numbers with 0 < b < a. Show that the map

$$f: S^1 \times S^1 \to \mathbb{R}^3, \quad (x_1, x_2, y_1, y_2) \mapsto ((a + by_1)x_1, (a + by_1)x_2, by_2)$$

is a smooth embedding.