

Spring 2024 Math 584 - Singularity Theory
Homework 3 - Varieties; Isolated Singularities
Due: 26/3/2024

1. REID, 3.12.(ii),(iii)
2. (a) Prove the claim in MILNOR, p.21:
The function $P : S_\varepsilon \times (0, \varepsilon^2] \rightarrow D_\varepsilon - x_0$ is a diffeomorphism.
(b) Why does not P extend over D_ε as a diffeomorphism rather than a homeomorphism?