## 23.12 [1R8] Discuss solutions of

Exercises

 $\begin{cases} y'(x) = (y(x) - x)^3 \\ y(0) = a \end{cases}.$ 

Qualitatively study the existence (local or global) of solutions, and the properties of monotonicity and convexity/concavity.

Solution 1. [1R9]