

**UM 101: QUIZ 1**

**Oct. 27, 2022**

**Duration.** 10 minutes

**Maximum score.** 10 points

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**Problem.** Let  $A$  be a Peano set with successor function  $S$ . Using only the Peano axioms, show that the range of  $S$  is  $A \setminus \{0\}$ .