Mathematics 220

Practice Quiz 1 — 10 minutes

- The quiz consists of 2 pages and 2 questions worth a total of 4 marks.
- No work on this page will be marked.
- Fill in the information below before turning to the quiz.

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1. **1 mark** Negate the following:

\[(x > 3) \iff ((x > 4) \land (x^2 > 9))\]

2. **3 marks** Let \(b \in \mathbb{Z}\). Prove that

If \(3 \nmid b\) then \(3 \mid 2b^2 + 1\).