Mathematics 300 Homework, February 2, 2022.

On Page 98 of the text do problems 11 and 12. At least part of the quiz on Friday will be based on these.

Problem 1. Show that if n is an odd integer, then $n^2 \equiv 1 \mod 4$.

Problem 2. Prove or give a counterexample: If $n \equiv 2 \mod 3$, then $2n^2 \equiv 4 \mod 6$.