

# MATH 3300 - Exam 1

- Material: Sections 1.1 – 1.10 and 2.1–2.3 and 2.5 (webwork sets ma 2&3&5).
- Review: In class, lecture before the test.
- No calculators, notes etc.

The questions will be of the following types.

1. Reduce matrices to *reduced* row echelon form.
2. Find general solutions to linear systems of equations.
3. Determine linear independence and linear dependence for a set of vectors.
4. Matrices of linear transformations. When is a linear transformation one-to-one? When is it onto?
5. Finding the inverse of a matrix.
6. Matrix equations.
7. Finding the  $LU$  factorization of a matrix.