



Norwegian University of Science  
and Technology  
Department of Mathematical  
Sciences

# MA1201 Linear Algebra and Geometry

## Exercise set 08

### Compulsory exercises

Hand in your solutions to these exercises. All answers must be justified.

#### Chapter 4.8 - Row, Column, and Null space

**Exercise 1** Do exercise 9a in chapter 4.8 of Elementary Linear Algebra.

**Exercise 2** Using the matrices in exercise 9a and 9b, find a basis for the column space.

**Exercise 3** Do exercise 11a in chapter 4.8 of Elementary Linear Algebra.

#### Chapter 4.9 - Rank–Nullity

**Exercise 4** Do exercise 9 in chapter 4.9 of Elementary Linear Algebra.

**Exercise 5** Do exercise 30 in chapter 4.9 of Elementary Linear Algebra.

**Exercise 6** Do exercise 34 in chapter 4.9 of Elementary Linear Algebra.