MA1201 Linear Algebra
and Geometry

Exercise set 02

Norwegian University of Science
and Technology
Department of Mathematical
Sciences

Glossary

Engelsk	Norsk
norm	norm / lengde / størrelse
unit vector	enhetsvektor
acute angle	spiss vinkel
obtuse angle	stump vinkel

Compulsory exercises

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

Chapter 3.1 - Vectors in $\mathbb{R}^n$

Exercise 1 Exercise 12c in chapter 3.1 of Elementary Linear Algebra.

Exercise 2 Exercise 13 in chapter 3.1 of Elementary Linear Algebra.

Exercise 3 Exercise 18 in chapter 3.1 of Elementary Linear Algebra.

Chapter 3.2 - Dot products

Exercise 4 Exercise 2a in chapter 3.2 of Elementary Linear Algebra.

Exercise 5 Exercise 3a and 3b in chapter 3.2 of Elementary Linear Algebra.

Exercise 6 Exercise 12a in chapter 3.2 of Elementary Linear Algebra.

Exercise 7 Exercise 16 in chapter 3.2 of Elementary Linear Algebra. (Note: bold font symbols are vectors, normal font symbols are scalars)

Exercise 8 Exercise 18a in chapter 3.2 of Elementary Linear Algebra.