# Basic Mathematics

#### Eirik and Stine

### September 2020

#### 1 Introduction

Inline math  $f(x) = 5x/3 = \frac{5x}{3}$ . Everyone knows than  $2 + 2 \neq 5$ . The square root  $\sqrt[3]{9}$  is 3. A Greek symbol is  $\Pi$ . Another example is  $\Lambda$ . Display math is

$$f(x) = 5x/3 = \frac{5x}{3}$$

More writing.... A second degree polynomial is on the form

$$f(x) = a_2 x^2 + a_1 x + a_{00}.$$

 $\sin(2)$ . We also have  $\cos(\pi) = -1$ . An important trigonometric identity is

$$\cos(x)^2 + \sin(x)^2 = 1.$$

We have that  $A \subseteq B$ .

## 2 Exercise - Zeros of Second Degree Polynomial

The (real) zeros of the second degree polynomial  $f(x) = ax^2 + bx + c$  is either:

• On the form

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a},$$

when there are two (real) zeroes.

• On the form

$$\frac{-b}{2a}$$

when there is one (real) zero.

• There are no real zeroes.