MA0301 Elementary
discrete mathematics
Spring 2017

Exercise set 1

Norwegian University of Science
and Technology
Institutt for matematiske fag

1   Homework Set 1

$\boxed{1}$ Grimaldi's book (5. ed., Exercises 2.1, page 54): solve **Exercise 3**

$\boxed{2}$ Grimaldi's book (5. ed., Exercises 2.1, page 54): solve **Exercise 8**

$\boxed{3}$ Grimaldi's book (5. ed., Exercises 2.1, page 54): solve **Exercise 9**

$\boxed{4}$ Grimaldi's book (5. ed., Exercises 2.2, page 66): solve **Exercise 13**
(Note that the truth value 1=T.)

$\boxed{5}$ Is the following argument valid?

$$(p \to q) \land \neg p \implies \neg q$$

Detail all steps of your reasoning.

$\boxed{6}$ Study EXAMPLE 2.18 in Grimaldi's book (5. ed., page 64) and solve **Exercise 20**
of Exercises 2.2 (page 67).

$\boxed{7}$ Grimaldi's book (5. ed., Exercises 2.3, page 85): solve **Exercises 9**

$\boxed{8}$ Grimaldi's book (5. ed., Exercises 2.3, page 85): solve **Exercises 11 c,d**