

Exam Cover

Student name: _____

ID-number: _____

THE HAGUE UNIVERSITY OF APPLIED SCIENCES

FACULTY TECHNOLOGY,
INNOVATION & SOCIETY

Location: **Delft**

Program: Electrical Engineering	Course / Test: MATH
Lecturer: J. op den Brouw Second Lecturer: B. Kuiper	Date: Thursday 6 July 2017 Time: 13:00 h – 14:30 h
Group: EP21, EP22, EQ2D Coursecode: E-MATH-th1	Number of pages: 2 (including this page) Number of questions: 3

With this exam you will receive:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Lined answer paper | <input type="checkbox"/> Questions written on exam |
| <input type="checkbox"/> Squared paper | <input type="checkbox"/> Answer form ABCDE |
| <input checked="" type="checkbox"/> Scratch paper | <input type="checkbox"/> Answer form Yes/No |
| <input type="checkbox"/> Lined cover sheet | <input type="checkbox"/> Answer form Yes/No/Questionmark |
| <input type="checkbox"/> Attachments: _____ | <input type="checkbox"/> Other: _____ |

Allowed tools:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Simple calculator | <input checked="" type="checkbox"/> Hand written notes: _____ |
| <input checked="" type="checkbox"/> Graphic/programmable calculator | <input checked="" type="checkbox"/> Books/readers: Reader MATH |
| <input type="checkbox"/> Computer | |
| <input type="checkbox"/> Formula sheet(s): _____ | |

Attention:

Please hand in your copy of the exam.

Grading of examination:

Total grading points is 60.

To be handed in:

- ☒ All documents marked with name and ID-code, sorted per document
- ☐ All documents marked with name and ID-code, sorted per student (in lined cover sheet)

Important:

For this exam, the rules of the Programme and Examination regulations apply. This document is present in the exam room.

*This exam is printed **double sided**;*

Write your name and studentnumber on all documents.

Question 1 (10 pt)Calculate $1 + 1$ **Question 2** (30 pt)

Please find the antiderivative of the following functions:

a) $\int x \ln x \, dx$ (10 pt)

b) $\int \sin^2 x \, dx$ (10 pt)

c) $\int x^2 \, dx$ (10 pt)

Question 3 (20 pt)Given the function: $f(x) = x^3 + 3x^2 + 5x + 1$. Find the extremae.

Grading table

Question:	1	2	3	Total
Points:	10	30	20	60
Score:				