

Instructions

First, you can **select the language** of the user interface (text and buttons) by clicking [here](#).

To start working on the exam, you need to **unlock** (decrypt) the exam using an unlock key. The unlock key is provided in an envelope that will be distributed by the supervisors shortly before the exam begins. You may not open the envelope before the supervisors officially start the exam. Opening the envelope ahead of time is considered academic misconduct and will lead to failing the exam.

After starting the exam, you can display **either individual tasks or all tasks at once** in the menu (header of the website).

The laptops do not have internet access. However, there are some installed applications you can use for editing, such as a **text editor** ("Kate") and a **terminal** ("Konsole") with a bash shell. You can access these through the *Start menu* at the bottom left of the screen.

Open the **Start menu** with the *Windows key on the keyboard* or by clicking on *Start* in the bottom left corner of the screen. In the Start menu, you will also find the **Settings** application, where you can customize keyboard and mouse settings.

You may connect a **wired USB Type-A mouse** that you bring with you. Use the USB port on the left side. **Do not unplug the USB stick on the right side if present.**

You can close and restart the browser at any time. Your saved answers will be automatically restored. To reopen the browser, double-click on *Exam/Prüfung* on the desktop or click on the Firefox icon in the Start menu.

In your home directory (/home/student), you are allowed to create and modify files. The content of the home directory will not be considered during grading. We will provide you with relevant files for the exam, if necessary, in the directory **exam-files** (in your home directory) after the start of the examination time. You may modify these files while working on the tasks. In case you want to reset the files, you can find the original files provided with the exam (without any changes) by following the link **exam-files-read-only** in your home directory. The link will bring you to the **/exam** folder, where you can find the original files. To prevent accidental deletion or modification of those provided files, you cannot modify the files located in the read-only directory. Hence, you must copy the corresponding file to the **exam-files** directory in order to reset the file.

In case of technical problems with the laptop or software, please contact a supervisor. The supervisor will transfer your answers to a replacement device for you to continue your work. Do not turn off your laptop or restart it. Manipulation of the exam laptop's hardware and software is prohibited and can lead to early termination and exclusion from the exam in severe cases.

You can adjust the **font size** yourself, for example, with the keyboard shortcuts **Ctrl-Plus** and **Ctrl-Minus**. You can also resize the browser window. This allows you to **arrange multiple windows side by side**. To do this, drag the browser's title bar to the center or edge of the screen while holding down the mouse button. To move a focused window to the left or right side of the screen, you can use the keyboard shortcut **Win-←** or **Win-→**.

You can access the characters [and] with the function key **AltGr-8** and **AltGr-9**, the characters { and } using **AltGr-7** and **AltGr-0**. The backslash \ is reached with **AltGr-B**, the tilde ~ with **AltGr-+**, and the pipe symbol | with **AltGr-<**.

Using the input fields

The exam application opens automatically when the browser starts. You enter your answers in the browser within input fields. Each input field has a **Save button** that you need to click to save the currently displayed value. If there are unsaved fields on a page, a warning will appear at the top right of the browser. If you switch to another page, the contents of unsaved fields will not be preserved. The following screenshots depict the possible states of the input fields.

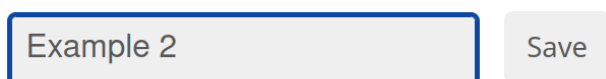
1. Content is **not** saved (blue border), active Save button.



Example 1

Save

2. Content is currently being saved (after clicking the Save button), field is deactivated. If it takes longer to save, there is a technical problem. Please contact a supervisor.



Example 2

Save

3. Content has already been saved (green border), deactivated Save button.



Example 3

Save

4. An error occurred while saving (double red frame). Try to save again. If the error continues to occur, please contact a supervisor.



Example 4

Save

Input fields with TeX support

The exam may rely on input fields that support rendering (La)TeX math elements. The input fields supporting TeX are indicated with a visible TeX symbol to the left of the input field (for a single line input) or in the top right corner (for a multiline textarea).

When wrapping parts of your answer with $\$ \dots \$$, TeX will attempt to render these parts. Text outside of $\$ \dots \$$ will be displayed as normal text. You can see your interpreted (rendered) answer in the *Your answer* section below the input field.

TeX	This is an example using a sum $\$ \sum_{i=0}^{10} a_i \$$	Save
Your answer: This is an example using a sum $\sum_{i=0}^{10} a_i$		

In case of errors in rendering your TeX code, an error message is given in *red* next to the code causing the error. Having errors in your TeX syntax **does not interfere** with saving your answers! During grading, the **identical content** of your saved answers is displayed, regardless of any TeX errors.

Editing in Multiple Browser Tabs

If you use multiple browser tabs or windows, please consider the following guidelines.

1. If you have opened a task in multiple tabs, your answers will **not** be automatically synchronized. You can update the field contents by reloading the page, for example, by clicking on the task in the menu.

Example: You open Task 1 and the All Tasks view in two tabs. Now, you change and save answers in the Task 1 tab. However, the All Tasks tab still displays the previous field contents.

2. When saving a field, previously saved contents will be overwritten.

Submit Exam

At the end of the examination time or for an early submission, click on the menu item *Submission*, which appears after the start of the examination time. Follow the instructions on the submission page. It also explains what you need to do if you want to submit your exam blank.

Early submission is only possible until 15 minutes before the end of the examination time. If you have followed the steps on the submission page, remain seated and inform a supervisor. The supervisor will collect the exam at your seat.