

# Handout 1

## Evaluation Criteria

Software Verification

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### 1 Summary of Exercise Grades

Exercise 1	definition of <code>distinct</code>	2 point
Exercise 2	<code>injective_cons</code>	4 point
Exercise 3	<code>proper_cuts_cons</code>	3 point
Exercise 4	<code>map_cons</code>	5 point
Exercise 5	<code>proper_cuts_correct</code>	6 point
Bonus exercise	<code>injective_map</code>	2 points
TOTAL		20 points (+2 bonus)

Table 1: Exercises Grades.

Table 1 summarizes the grades for each exercise in Handout 1.

### 2 Proof Organization

- If a proof is divided in  $n$  cases, each case counts  $1/n$  points of the exercise grade.
- If a case as  $m$  sub-cases, each sub-case counts  $1/m$  points of the case grade.
- If a proof is not clearly organized in cases and sub-cases, it loses 20% of the exercise total grade.
- A proof that unnecessarily introduces superfluous cases (*e.g.*, doing **induction** when the proof does not require induction) loses 20% of the exercise total grade.

### 3 Proof Readability

You should indent and comment your proof, indicating the main cases and sub-cases. A proof that is hard to read loses 5% of the exercise total grade.

### 4 Proof Automation and Conciseness

You should strive for as much automation as possible in our proofs. This means using tactics such `lia`, `auto`, or `assumption` as soon as possible. If a case within a proof is longer than required, it loses 10% of that specific case grade.