A glimpse of Lean
Tactic cheatsheet

Logical symbol	Appears in goal	Appears in hypothesis `h`
$\forall$ (for all)	`intro x`	`apply h` or `specialize h x`
$\exists$ (there exists)	`use x`	`rcases h with ⟨x, hx⟩`
$\to$ (implies)	`intro h`	`apply h` or `specialize h1 h2`
$\leftrightarrow$ (if and only if)	`constructor`	`rw [h]`
$\wedge$ (and)	`constructor`	`h.1` or `h.2`

Tactic	Effect
	Rewriting and simplifying
`ring`	prove the goal by using the axioms of a commutative ring.
`rw [`*expr*`]`	in the goal, replace (all occurrences of) the left-hand side of *expr* by its right-hand side. *expr* must be an equality, iff statement or definition.
`rw [`*expr*`] at h`	... rewrite in hypothesis `h`.
`simp`	simplify the goal using all simplifications lemmas.
`unfold`	unfold the definition of the given term.
	Reasoning with equalities, inequalities, and other relations
`calc?`	generate a `calc` block
`calc` $a = b$ `:= by` *tac* $\_ \leq c$ `:= by` *tac* $\_ < d$ `:= by` *tac*	perform a calculation generate a new step by putting the cursor after `:= by` and shift-click on subterms in the goal.
`congr`	prove an equality using congruence rules.
`gcongr`	prove an inequality using congruence rules.
	Searching
`apply?`	gives a list of lemmas that can apply to the current goal.