

# Homotopy Type Theory

HoTT Book's exercises  
(work in progress)

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## Abstract

This is a self-contained version of some solutions for HoTT-Book's exercises. The idea is to unpackage all as long as possible to get a better understanding. Solutions are type-checked as a whole using Agda v2.5.3.

## Contents

*Exercise 0.1.* Suppose we add to type theory the *equality reflection rule* which says that if there is an element  $p : x = y$ , then in fact  $x \equiv y$ . Prove that for any  $p : x = x$  we have  $p \equiv \text{refl}_x$ . (This implies that every type is a *set* in the sense to be introduced in ??; see ??.)