$https://github.com/Stavan-Jain/abstract-algebra-beta\ https://github.com/Stavan-Jain/abstract-algebra-beta\ https://github.com/Stavan-Jain/abstract-algebr$ 

## Abstract Algebra Formalization project beta

Stavan Jain

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In this chapter, h denotes the function  $h(x) := x \log \frac{1}{x}$  for  $x \in [0, 1]$ . [Concavity] h is strictly concave on [0, 1].

*Proof.* Check that h' is strictly monotone decreasing.