# Problem Set 7

Released: March 31, 2023
Due: April 10, 2023, 11:59pm
Last modified: Apr 4, 2023, 3pm

Modifications:

- Expand Problem 1 to prove the needed lemma.

Submit your solutions to this homework on Canvas in a group of 2 or 3. Your solutions must be submitted in pdf produced using LaTeX.

## Problem 1

Riehl, *Category Theory in Context*, Exercise 4.1.i page 121 and Exercise 4.1.v, page 122.

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## Problem 2

Riehl, *Category Theory in Context*, Exercise 4.5.vi, page 143. You only need to prove the lemma about the unit or the co-unit. The other then follows by duality.

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