

# Assignment 3

Principles of Programming Languages  
II UW<sub>r</sub>, 2017/18

due November 8, 2017

**Problem 1 (2 pts).** Solve Exercise 3.9 from EoPL.

**Problem 2 (2 pts).** Solve Exercise 3.10 from EoPL.

**Problem 3 (2 pts).** Solve Exercise 3.17 from EoPL.

**Problem 4 (2 pts).** Solve Exercise 3.26 from EoPL.

**Problem 5 (2 pts).** Solve Exercise 3.28 from EoPL.

**Problem 6 (3 pts).** Implement a call-by-name (lazy) version of PROC, i.e., such where a function argument is not evaluated before the function is called, but rather, each time the formal parameter of the function is referenced. It is your decision whether let-expressions become lazy or remain eager.

You should specify denoted values for representing delayed computations first, and then implement the specification using both a procedural and a data-structure representation.