

Homework 9 (due Monday 12 November)

Prove Lemma 40.2 (iii)–(iv) from the lecture notes.

Lemma 40.2. Prove that:

- (iii) $x_1 + x_2$ represents addition. [20pts]
- (iv) $x_1 \cdot x_2$ represents multiplication. [20pts]
- (v) $x_1 < x_2$ represents the strict ordering of ω . [20pts]