sheet 11

Exercises to the Lecture FSVT

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## Exercise 1:

Let  $sig = (\{int\}, 0 :\rightarrow int, s, abs : int \rightarrow int, +, - : int, int \rightarrow int).$ 

Prove that there is no finite specification for the *sig*-algebra  $\mathbb{Z}$  with the usual interpretation of 0, s, +, -, and *abs*. I.e. there is no finite *sig*- specification *spec* s.t.  $T_{spec} \cong \mathbb{Z}$ .

## Exercise 2:

Prove theorem 10.15.: For every recursive term-generated sig-algebra  $\mathfrak{A}$ , there is a finite enrichment sig' of sig and a finite specification spec' = (sig', E) with  $T_{spec'} \mid_{sig} \cong \mathfrak{A}$ .

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