DECIDING CONSTRUCTOR EQUIVALENCE

Abstract. In the previous section we described definitional equality for constructors. The presentation given the most natural definition of the operator $\equiv$, but is not so amenable to translation to code. Here we will describe a couple of algorithms to decide whether $\Gamma \vdash c_1 \equiv c_2 : k$. The first, **normalize-and-compare** is conceptually appealing but doesn't scale to some richer calculi we will cover. So we will develop a second approach, called **algorithmic constructor equivalence**, which is an inductively defined judgement $\Gamma \vdash c_1 \iff c_2 : k$ that better lends itself to implementation in code.

1. Normalize-and-compare