

## RATIONAL SUMS

## Why

We want to add rationals.<sup>1</sup>

## **Definition**

Let  $[(a,b)], [(b,c)] \in \mathbf{Q}$ . The rational sum of [(a,b)] with [(b,c)] is [(ad+bc,bd)].<sup>2</sup>

## Notation

We denote the rational sum of  $q, r \in \mathbf{Q}$  by q + r.

 $<sup>^{1}\</sup>mathrm{Future}$  editions will expand on this why.

 $<sup>^2\</sup>mathrm{An}$  account that this is well-defined will appear in future editions.

