$\frac{1}{2}$ $\frac{2}{4}$ $\frac{7}{14}$ Fractions $= \mathbb{Z} \times \mathbb{Z} \setminus \{0\} = F$

$\alpha = \{(1,2), (2,4), (7,14), (-1,-2), \ldots\}$

$\beta = \{(2,3), (-2,-3), (6,9), (-6,9), \ldots\}$

$(x,y) \sim (a,b)$ if $xb = ya$

Define $Q = F/\sim$ $\frac{x}{y} \oplus \frac{a}{b} = \frac{xb+ya}{yb}$

$\alpha \overset{?}{+} \beta$ $+$ addition in $\mathbb{Z}$, $\oplus$ addition in F

$(x,y) \oplus (a,b) = (xb+ya, yb) \in F$

$\alpha \bar{\oplus} \beta \ni (x,y) \oplus (a,b)$ where $(x,y) \in \alpha$ $(a,b) \in \beta$