

1 Definition

1.1 DEFINITION (Graph - Abstract). An **Abstract Graph** G is a set (V, E, ∂, i) where V and E are non-empty sets and $\partial : E \rightarrow V$ and $i : E \rightarrow E$ are functions satisfying $i^2(e) = e$ and $i(e) \neq e$ for all $e \in E$.

We set $o(e) := \partial(e)$ and $t(e) := (\partial \circ i)(e)$ for origin and terminal vertices and put $\bar{e} := i(e)$.

1.2 DEFINITION (Fold). (placeholder)