Definition (Graph). A *graph* $\mathcal{G} = \langle \mathbf{V}, \mathbf{A}, \mathrm{src}, \mathrm{tgt} \rangle$ consists of a set of vertices $\mathbf{V}$, a set of arrows $\mathbf{A}$, and two functions $\mathrm{src}, \mathrm{tgt} : \mathbf{A} \to \mathbf{V}$, called the *source* and *target* functions, respectively. Given $a \in \mathbf{A}$ with $\mathrm{src}(a) = v$ and $\mathrm{tgt}(a) = w$, we say that a is an *arrow* from v to w.