

Definition (Semigroup right action (preliminary version)). A *semigroup **right** action* of a semigroup **S** onto a set **A** is a map

$$\text{Contravact} : \mathbf{A} \times \mathbf{S} \rightarrow \mathbf{A}$$

such that, for all $a \in \mathbf{A}$,

$$\text{Contravact}(\text{Contravact}(a, x), y) = \text{Contravact}(a, x \circ_{\mathbf{S}} y).$$