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preadditive functor

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**Definition 0.1.** A functor between two preadditive categories  $\mathcal{A}_{\mathcal{P}}$  and  $\mathcal{A}'_{\mathcal{P}}$  is called a *(pre) additive (or preadditive) functor*, if for any pair of morphisms  $f, g \in \text{Hom}_{\mathcal{A}_{\mathcal{P}}}(X, Y)$  one has that  $F(f + g) = F(f) + F(g)$ .