NOTE ON POLYNOMIALS

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Notation 0.1. We employ the following notations.

- Sets are regarded as discrete categories.
- We write $\mathfrak{CAT}$
- For each set S and a functor $X \colon S \longrightarrow \mathbf{Set}$, we write X_s for the image of $s \in S$ under X. Moreover, we write $(X_s)_{s:S}$ for X.

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Definition 0.2. We define a category **Poly** as the Grothendieck construction of the following pseudo functor.

$$\mathbf{Set} \xrightarrow{\;[-,\mathbf{Set}]^{\mathrm{op}}\;} \mathfrak{CAT}$$

A **_polynomial_** is an object in **Poly**.

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REFERENCES

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