The blossoming principle

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1 Polynomial maps between affine spaces

Definition 1. A coordinate system on a given affine space (P, V, +) consists of an origin point in P and a vector space basis for V.

 $\textbf{Definition 2.} \ \, \text{A polynomial map between two affine spaces with chosen coordinate systems} \ldots \\$

Theorem 3. Polynomial map definition is independent of chosen affine space basis.

Definition 4. Polynomial map (for any basis)

Theorem 5. Affine maps are polynomial of degree 1.

2 Blossoming principle

Definition 6. Multiaffine map

Definition 7. Symmetric map

Theorem 8. Blossoming principle