

(2) $\mathbb{R} \rightarrow \mathbb{R} \dots$

$\mathcal{M}: \mathbb{V} \rightarrow \mathbb{V}^*$

$\mathbb{V}^* \cong \mathbb{V}$

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$\dim \mathbb{V} = \dim \text{Ker } \mathcal{M} + \dim \text{Im } \mathcal{M}$

$\mathbb{V}^* \cong \mathbb{V}$

$\dim \mathbb{V}^* = \dim \mathbb{V}$

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