1 | $p(T)$ **def**

Suppose $T \in \mathcal{L}(V)$ and $p \in \mathcal{P}(\mathbb{F})$ is a polynomial given by

$$P(z) = a_0 + a_1 z + a_2 z^2 + \cdots + a_m z^m$$

for $z \in$ F $. Then $p(T)$ is the operator defined by

$$p(T) = a_0 I + a_1 T + a_2 T^2 + \cdots + a_m T^m$$

2 | **using**   **deps**

2.1 | **Operator Exponents**

3 | **intuition**

3.1 | **Exactly how you would expect it to work**

4 | **results**

4.1 | **For some operator $T \in \mathcal{L}(V)$ the function from $\mathcal{P}(\mathbb{F})$ to $\mathcal{L}(V)$**

$$p \mapsto p(T)$$

is linear