

Lesson 12

One example

Show there is a unique linear transformation $T: P_2(\mathbb{R}) \rightarrow P_2(\mathbb{R})$ such that $T(1+x+x^2) = 2$, $T(4-2x^2) = x^2$, $T(2x) = x+5x^2$.

Compute $T(x+1)$.