Worksheet
3/9/2020

Name: _____

$P_2(\mathbb{R})$ is an inner product space with

$$(u, v) = \int_0^1 u(x)v(x)dx.$$

Consider a linear map $G : P_2(\mathbb{R}) \to P_2(\mathbb{R})$ given by $G(u)(x) = u(x + 1)$. Find the adjoint operator G^*. Is G a unitary operator?

See Lecture 26.