

NAME: _____

OCTOBER 17, 2018
MATH 232 DISCUSSION 14

Instructions: This assignment is open everything. Open book, open notes, open laptop, open conversation. You will always be graded on the work that you show. Cite your sources. You have 10 minutes.

Discussion 14.1. As a reminder, $\mathbb{P}_3 = \text{Span}\{1, t, t^2, t^3\}$ is the vector space of polynomials of degree at most 3. For this problem, consider the subspace $H \subseteq \mathbb{P}_3$ given by

$$H = \{p \in \mathbb{P}_3 \mid p(1) = p(2) = 0\}.$$

(You do not need to check that H is a subspace. It is.) Find a nonzero vector $h \in H$.