

Name: Section (time):

Math 340 Quiz *6*

- 1.) Is $\{\mathbf{x} \in \mathbb{R}^3 \mid x_1 + x_2 = 0\}$ a subspace of \mathbb{R}^3 ? Why or why not? Assume the usual addition and scalar multiplication operations.
- 2.) Is $(1, 0)$ in the span of vectors $(1, 1)$ and $(-1, -1)$? Show why or why not.