Problem Set 14, Math 54-Lec 3, Linear Algebra, Fall 2017

October 11th, 2017

Problem 1 Let $W \subseteq R^4$ consist of all vectors whose entries sum to 0.

(a.) Find an orthonormal basis for W.

(b.) Use your results from part a to find the vector in W closest to $\vec{y} = \begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \end{bmatrix}$