

Math 54 Quiz 12
GSI: Lionel Levine
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Name:

1. Find the coordinates of the vector $\mathbf{w} = (1, 3, 5, 7)$ in the orthogonal basis

$$\begin{aligned}\mathbf{v}_1 &= (1, 1, 1, 1) \\ \mathbf{v}_2 &= (1, 1, -1, -1) \\ \mathbf{v}_3 &= (1, -1, 1, -1) \\ \mathbf{v}_4 &= (1, -1, -1, 1)\end{aligned}$$

for $\mathbb{R}^4$.