MATH 4242 Quiz 4

Name:_____
Student Id:_____

Let $V = \mathbb{R}^3$ with orthonormal basis e_1, e_2, e_3 (the standard basis). The inner product is taken to be the usual dot product.

Let $W = \{(x, y, 0) | x, y \in \mathbb{R}\}$ be the subspace of V. Compute the orthogonal projection of $v = (1, 2, -1)$ onto W.