

Math 54 Quiz 9  
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Name:

1. (a) Find a basis for the subspace  $W$  of  $\mathbb{R}^4$  given by

$$W = \{(x_1, x_2, x_3, x_4) \in \mathbb{R}^4 \mid x_1 - x_2 + x_3 - x_4 = 0\}.$$

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- (b) What is  $\dim W$ ?