QUIZ October 18, 2013

Clicker Instructions: A = True; B = False; C = I don't know; D = No truth value correct = 1pt; don't know = 0pt; wrong = 0pt

1. The following is true in a vector space:

$$c(d\mathbf{u}) = (cd)\mathbf{u}$$

where c and d are scalars and \mathbf{u} is a vector.

- 2. \mathbb{R}^2 is a subspace of \mathbb{R}^3 .
- 3. The set of vectors of the form

$$\begin{bmatrix} a-2b \\ b \end{bmatrix}$$

is a subspace of \mathbb{R}^2

4. The set of constant polynomials is a subspace of \mathbb{P}_3 , the vector space of polynomials of degree at most 3.