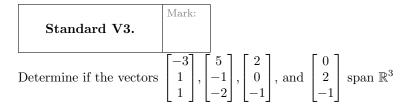
Name:	
J#:	Dr. Clontz
Date:	

## MASTERY QUIZ DAY 17

Math 237 – Linear Algebra Fall 2017

Version 4

Show all work. Answers without work will not receive credit. You may use a calculator, but you must show all relevant work to receive credit for a standard.



Standard V4.

Let W be the set of all  $\mathbb{R}^3$  vectors  $\begin{bmatrix} x \\ y \\ z \end{bmatrix}$  satisfying x+y+z=1 (this forms a plane). Determine if W is a subspace of  $\mathbb{R}^3$ .

Determine if the set 
$$\left\{ \begin{bmatrix} 0\\1\\1\\1 \end{bmatrix}, \begin{bmatrix} 1\\-1\\0\\2 \end{bmatrix}, \begin{bmatrix} 1\\0\\-1\\0 \end{bmatrix}, \begin{bmatrix} 0\\2\\0\\-1 \end{bmatrix} \right\}$$
 is a basis of  $\mathbb{R}^4$ .

Additional Notes/Marks