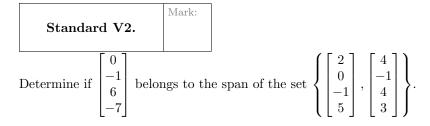
Name:	
J#:	Dr. Clontz
Date:	

## MASTERY QUIZ DAY 15

Math 237 – Linear Algebra Fall 2017

Version 5

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 S1.	Mark:

Determine if the set of polynomials  $\{x^2 + x, x^2 + 2x - 1, x^2 + 3x - 2\}$  is linearly dependent or linearly independent

Standard S3.

Mark:

Let W be the subspace of  $\mathcal{P}_2$  given by  $W = \text{span}\left(\left\{-3x^2 - 8x, x^2 + 2x + 2, -x + 3\right\}\right)$ . Find a basis for W.

Standard S4.  $\begin{array}{c|c}
Mark: \\
\hline
\begin{pmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix} \begin{bmatrix} 2 \\ 0 \end{bmatrix} \begin{bmatrix} 3 \\ 1 \end{bmatrix} \begin{bmatrix} 1 \\ 1 \end{bmatrix}
\end{pmatrix}$ 

Let  $W = \operatorname{span}\left(\left\{\begin{bmatrix}1\\-1\\3\\-3\end{bmatrix},\begin{bmatrix}2\\0\\1\\1\end{bmatrix},\begin{bmatrix}3\\-1\\4\\-2\end{bmatrix},\begin{bmatrix}1\\1\\1\\-7\end{bmatrix}\right\}\right)$ . Compute the dimension of W.

Additional Notes/Marks