

Quiz 6

MA 262
Artur's Class

February 28, 2012

Problem 1

$$A = \begin{pmatrix} 2 & 0 \\ 0 & 0 \end{pmatrix}$$

Compute $\text{nullspace}(A)$.

Problem 2

$$A = \begin{pmatrix} 0 & 0 \\ 0 & 0 \end{pmatrix}$$

Compute $\text{nullspace}(A)$.

Problem 3

$$A = \begin{pmatrix} 2 & 0 \\ 0 & 1 \end{pmatrix}$$

Compute $\text{nullspace}(A)$.

Problem 4

Consider the differential equation

$$y'' + 2y' - y = 1.$$

- Write down the solution space in set notation. (Do not solve the equation.)
- Is this solution space a subspace of $C(\mathbb{R})$.