

# Quantum Programming HW5

B490 : Spring 2020

*Joshua Larkin*

**1 2.2.9**

**2 2.2.10**

**3 2.2.11**

**4 2.2.14**

**5 2.3.1**

Show that the following set of vectors is not linearly independent.

$$\left\{ \begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}, \begin{bmatrix} 3 \\ 0 \\ 2 \end{bmatrix}, \begin{bmatrix} 1 \\ -4 \\ -4 \end{bmatrix} \right\}$$

**6    2.3.x**

**7    2.3.x**

**8    2.3.x**

**9    2.3.x**

**10   2.3.x**

**11   2.3.x**

**12   2.3.x**

**13   2.3.x**

**14   2.3.xx**

**15   2.4.x**

**16   2.4.xx**