

## Attendance Quiz for Lecture 4

**NAME:** (print!) \_\_\_\_\_ **Section:** \_\_\_\_\_

**E-MAIL ADDRESS:** (print!) \_\_\_\_\_

1. Determine whether the given system is consistent, and if so, find its general solution.

$$x_1 + 3x_2 + x_3 + x_4 = -1$$

$$-2x_1 - 6x_2 - x_3 = 5$$

$$x_1 + 3x_2 + 2x_3 + 3x_4 = 2 \quad .$$

2. Find the rank and nullity of the following matrix:

$$\begin{bmatrix} 1 & 1 & 1 & 1 \\ 1 & 2 & 4 & 2 \\ 2 & 0 & -4 & 1 \end{bmatrix} \quad .$$