## Quiz 5

1. Bring the following homogeneous system to row-reduced echelon form

$$3x_1 + 3x_2 + 2x_3 + 4x_4 = 0$$
$$6x_1 + 6x_2 + 2x_3 + 10x_4 = 0$$

$$6x_1 + 6x_2 + 2x_3 + 10x_4 = 0$$

Then write the solution set as the span of vectors (the parameters coming from the free variables).

2.	In the matrix $A$ corresponding to the system $A\mathbf{x} = 0$ above, show that the pivot columns of $A$ (the original $A$ , not its row-reduced equivalent) are linearly independent.