Dawson College: **Linear Algebra**: 201-105-05-S3: Fall 2012

Name: _____
Student ID: _____

Quiz 7

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. §2.3 #22 *(5 marks)* Decide whether the given matrix is invertible, and if so, use the adjoint method to find its inverse.

$$A = \begin{bmatrix} 2 & 0 & 0 \\ 8 & 1 & 0 \\ -5 & 3 & 6 \end{bmatrix}$$

Question 2. §2.3 #27 *(5 marks)* Solve by Cramer's rule.

$$\begin{array}{rcrcrcr} x_1 & - & 3x_2 & + & x_3 & = & 4 \\ 2x_1 & - & x_2 & & & = & -2 \\ 4x_1 & & & - & 3x_3 & = & 0 \end{array}$$