

Name: _____
Student ID: _____

Quiz 4

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. (1 mark) Find a nonzero 3×3 matrix A such that $A^t = -A$.

Question 2. (2 marks) Find A^{-1} if a A square matrix satisfies $A^2 + 3A + I = 0$

Question 3. (7 marks) Solve for the matrix A :

$$(2I + 3A^{-1})^t = \begin{bmatrix} 2 & 1 \\ 1 & 3 \end{bmatrix}$$