

Last Name: _____

First Name: _____

Student ID: _____

Quiz 6 (A)

Question 1. (5 marks)

$$\text{Given } \det \begin{bmatrix} a & b & c \\ d & e & f \\ g & h & i \end{bmatrix} = 14 \quad \text{find} \quad \det \begin{bmatrix} g & h & i \\ d+2a & e+2b & f+2i \\ 3a & 3b & 3g \end{bmatrix}$$

Question 2. (2 marks) Solve for x :

$$\det \begin{bmatrix} x & 1 & x^2 \\ 2 & 1 & 4 \\ 3 & -1 & -9 \end{bmatrix} = 0$$

Question 3. (3 marks) Clearly graph the point $P(2, 3, -3)$ on the right-handed coordinate system.