

Last Name: _____

First Name: _____

Student ID: _____

Quiz 6 (B)

Question 1. (5 marks)

$$\text{Given } \det \begin{bmatrix} a & b & c \\ d & e & f \\ g & h & i \end{bmatrix} = 12 \quad \text{find} \quad \det \begin{bmatrix} d-2a & e-2b & f-2c \\ 4a & 4b & 4c \\ g & h & i \end{bmatrix}$$

Question 2. (2 marks) Solve for x :

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

Question 3. (3 marks) Clearly graph the point $P(2, -4, 2)$ on the right-handed coordinate system.