Student Number: Name: Bryan Hoang

1. (10 points) Answer:

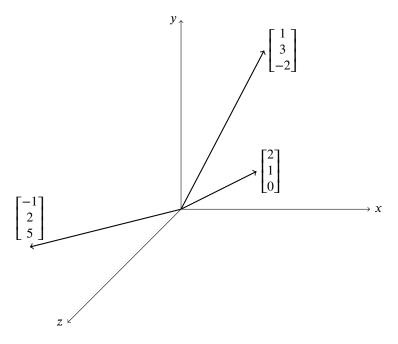


Figure 1: Plot of the vectors that form the fundamental domain.

The volume of the fundamental domain formed by the basis vectors, V_L , can be found by computing the determinant of the matrix formed by the vectors. Therefore, the volume of the fundamental domain is

$$V_L = \begin{vmatrix} \det \begin{pmatrix} 1 & 3 & -2 \\ 2 & 1 & 0 \\ -1 & 2 & 5 \end{vmatrix} \end{vmatrix}$$
$$= \boxed{35}.$$