

$$\begin{array}{cccc}
 1 & 1 & 2 & 3 \\
 0 & 5 & -2 & 4 \\
 0 & -2 & 4 & -3 \\
 0 & -4 & 1 & -4
 \end{array}
 \quad (1, 3, 0)$$

$$\begin{array}{cccc}
 0 & 0 & -2 & 1 \\
 0 & 0 & 3 & -1 \\
 0 & -1 & -4 & 3 \\
 0 & 4 & -1 & 1
 \end{array}
 \quad (0, -4, 4)$$

$$(-5, 5) \rightarrow (0, 0000)$$

$$(-2, 3) \rightarrow (1, 0001)$$