A COMPLETE LIST OF g-VECTORS FOR A_2

We recall that $\mathcal{A}_2 = \mathbb{F}Q/I$ is given by

$$Q: 1 \xrightarrow[\beta_1]{\alpha_1} 2 \text{ with } I: \langle \alpha_1 \beta_1 \rangle.$$

Then, the complete list of g-vectors for \mathcal{A}_2 is as follows.

- $(1) \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$
- $(2) \begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix}$
- $(3) \begin{pmatrix} 1 & 0 \\ 1 & -1 \end{pmatrix}$
- $(4) \begin{pmatrix} -1 & 1 \\ 0 & 1 \end{pmatrix}$
- $(5) \begin{pmatrix} 1 & -1 \\ 0 & -1 \end{pmatrix}$
- $(6) \begin{pmatrix} -1 & 1 \\ -1 & 0 \end{pmatrix}$