## A COMPLETE LIST OF $g$-VECTORS FOR $\mathcal{A}_{2}$

We recall that $\mathcal{A}_{2}=\mathbb{F} Q / I$ is given by

$$
Q: 1 \underset{\beta_{1}}{\stackrel{\alpha_{1}}{\rightleftarrows}} 2 \text { with } I:\left\langle\alpha_{1} \beta_{1}\right\rangle
$$

Then, the complete list of $g$-vectors for $\mathcal{A}_{2}$ is as follows.
(1) $\left(\begin{array}{ll}1 & 0 \\ 0 & 1\end{array}\right)$
(2) $\left(\begin{array}{cc}-1 & 0 \\ 0 & -1\end{array}\right)$
(3) $\left(\begin{array}{cc}1 & 0 \\ 1 & -1\end{array}\right)$
(4) $\left(\begin{array}{cc}-1 & 1 \\ 0 & 1\end{array}\right)$
(5) $\left(\begin{array}{ll}1 & -1 \\ 0 & -1\end{array}\right)$
(6) $\left(\begin{array}{ll}-1 & 1 \\ -1 & 0\end{array}\right)$

