

# Matrix Inverses Extra Practice Solutions

$$\begin{pmatrix} 1 & 0 \\ -2 & 1 \end{pmatrix} \quad \begin{pmatrix} -\frac{1}{3} & \frac{2}{3} \\ \frac{2}{3} & -\frac{1}{3} \end{pmatrix} \quad \begin{pmatrix} -\frac{1}{6} & \frac{2}{3} \\ \frac{1}{3} & -\frac{1}{3} \end{pmatrix} \quad \text{Singular}$$

$$\begin{pmatrix} -2 & 1 & 1 \\ -1 & 1 & 0 \\ 3 & -1 & -1 \end{pmatrix} \quad \text{Singular} \quad \begin{pmatrix} 0 & -1 & 1 \\ 1 & -1 & 0 \\ -2 & 4 & -1 \end{pmatrix}$$

$$\text{Singular} \quad \begin{pmatrix} \frac{3}{4} & \frac{1}{4} & -\frac{1}{4} & \frac{1}{4} \\ -\frac{1}{4} & \frac{1}{4} & \frac{3}{4} & -\frac{4}{3} \\ \frac{1}{4} & -\frac{1}{4} & \frac{1}{4} & -\frac{1}{4} \\ 0 & 0 & 0 & 1 \end{pmatrix} \quad \text{Singular}$$

$$\text{Singular} \quad \text{Singular} \quad \begin{pmatrix} -1 & -1 & 0 \\ \frac{1}{3} & -\frac{1}{3} & \frac{1}{3} \\ \frac{1}{3} & \frac{2}{3} & \frac{1}{3} \end{pmatrix}$$

$$\begin{pmatrix} -1 & 0 & 0 \\ 0 & -1 & \frac{1}{2} \\ 0 & 0 & \frac{1}{2} \end{pmatrix} \quad \begin{pmatrix} -1 & 1 & 0 \\ -1 & 0 & 1 \\ 1 & 0 & 0 \end{pmatrix} \quad \text{Singular}$$