6. What is the determinant for $\begin{bmatrix} 6 & 0 & 2 \\ 1 & -1 & 0 \\ 0 & 1 & 1 \end{bmatrix}$?

(a) -4 (b) -5 (c) -6 (d) -7

7. What is the inverse for $\begin{bmatrix} 1 & 0 & 3 \\ -1 & 1 & -1 \\ 2 & 1 & 0 \end{bmatrix}$?

(a) $\begin{bmatrix} -\frac{1}{8} & -\frac{3}{8} & \frac{3}{8} \\ \frac{1}{4} & \frac{3}{4} & \frac{1}{4} \\ \frac{3}{8} & \frac{1}{8} & -\frac{1}{8} \end{bmatrix}$

(b) $\begin{bmatrix} \frac{1}{4} & \frac{3}{4} & \frac{1}{4} \\ \frac{3}{8} & \frac{1}{8} & -\frac{1}{8} \\ -\frac{1}{8} & -\frac{3}{8} & \frac{3}{8} \end{bmatrix}$

(c) $\begin{bmatrix} \frac{3}{8} & \frac{1}{8} & -\frac{1}{8} \\ -\frac{1}{8} & -\frac{3}{8} & \frac{3}{8} \\ \frac{1}{4} & \frac{3}{4} & \frac{1}{4} \end{bmatrix}$

(d) $\begin{bmatrix} \frac{1}{8} & \frac{3}{8} & -\frac{1}{8} \\ -\frac{3}{8} & -\frac{1}{8} & \frac{3}{8} \\ \frac{3}{4} & \frac{1}{4} & \frac{1}{4} \end{bmatrix}$