## EXERCISES OF SECTION 3.3

Question 1. Suppose that $A$ is a $3 \times 3$ skew symmetric matrix. What is $|A|$ ?

Question 2. For what value(s) of $k$ does the following linear system have infinitely many solutions?

$$
\left[\begin{array}{ccccc}
4 & -3 & 0 & \vdots & k-3 \\
k-1 & 0 & 3 & \vdots & -3 \\
k-1 & 3 & k+3 & \vdots & -8
\end{array}\right]
$$

