1. (2, 1), (0, 7), and (6, 2) are three vertices of a parallelogram in \( \mathbb{R}^2 \).

   (a) (Two points) What is the fourth vertex of this parallelogram?

   (b) (Four points) Find the area of the parallelogram.

2. (Four points) Use Cramer’s rule to solve the matrix equation

\[
\begin{bmatrix}
3 & 4 \\ 2 & -3
\end{bmatrix} \bar{x} = \begin{bmatrix}
1 \\ 4
\end{bmatrix}.
\]