Here is a simple example of using \texttt{TikZ} to draw a graph, in this case $K_4$.

\begin{tikzpicture}
  %% vertices
  \draw[fill=black] (0,0) circle (3pt);
  \draw[fill=black] (4,0) circle (3pt);
  \draw[fill=black] (2,1) circle (3pt);
  \draw[fill=black] (2,3) circle (3pt);
  %% vertex labels
  \node at (-0.5,0) {1};
  \node at (4.5,0) {2};
  \node at (2.5,1.2) {3};
  \node at (2,3.3) {4};
 %%% edges
  \draw[thick] (0,0) -- (4,0) -- (2,1) -- (0,0) -- (2,3) -- (4,0) -- (2,1) -- (2,3);
\end{tikzpicture}

The \texttt{\LaTeX} code that produced it is as follows:

\begin{verbatim}
\begin{tikzpicture}
  \draw[fill=black] (0,0) circle (3pt);
  \draw[fill=black] (4,0) circle (3pt);
  \draw[fill=black] (2,1) circle (3pt);
  \draw[fill=black] (2,3) circle (3pt);
  \node at (-0.5,0) {1};
  \node at (4.5,0) {2};
  \node at (2.5,1.2) {3};
  \node at (2,3.3) {4};
  \draw[thick] (0,0) -- (4,0) -- (2,1) -- (0,0) -- (2,3) -- (4,0) -- (2,1) -- (2,3);
\end{tikzpicture}
\end{verbatim}

This should be pretty self-explanatory. The ordered pairs in parentheses are all simply coordinates in $\mathbb{R}^2$. The edges are drawn by taking a walk through the graph, using each edge exactly once.

You can do much fancier things in \texttt{TikZ}, but this should at least get you started.