1. Solve the following triangular system of equations

\[
\begin{align*}
\begin{cases} 
  x + 3y - 2z &= -7 \\
  y + 2z &= 14 \\
  z &= 5 
\end{cases}
\end{align*}
\]

2. Solve the system of equations

\[
\begin{align*}
\begin{cases} 
  -3x + 7y &= 14 \\
  2x - y &= -13 
\end{cases}
\end{align*}
\]

3. Find the system of equations that is needed to find \(a\), \(b\) and \(c\) in the equation of the form \(y = ax^2 + bx + c\) whose graph passes through the points \((2, 3)\), \((-2, 7)\) and \((1, -2)\). Do not solve the system of equations you found.