## Problem 3

Find a jump in a thermal expansion coefficient $\alpha$ and a compressibility $\beta$ at the second order phase transition point.
Definitions:

$$
\begin{aligned}
\alpha & =\frac{1}{V}\left(\frac{\partial V}{\partial T}\right)_{P} \\
\beta & =-\frac{1}{V}\left(\frac{\partial V}{\partial P}\right)_{T}
\end{aligned}
$$

