## Special Problem 3.5-14

A two port network has at its input the signal $v_{T}(t)$, plotted below:



Say the network has the transfer function shown below, where $A$ and $B$ are unknown values.

$$
v_{0}(t)=\left\{\begin{array}{c}
5 \text { if } v_{I}>A \\
v_{I}+B \text { if } v_{I}<0
\end{array}\right.
$$

1. Determine the values of $A$ and $B$ (provide justification!).
2. Carefully plot the output voltage $v_{o}(t)$ on the graph on the next page.

