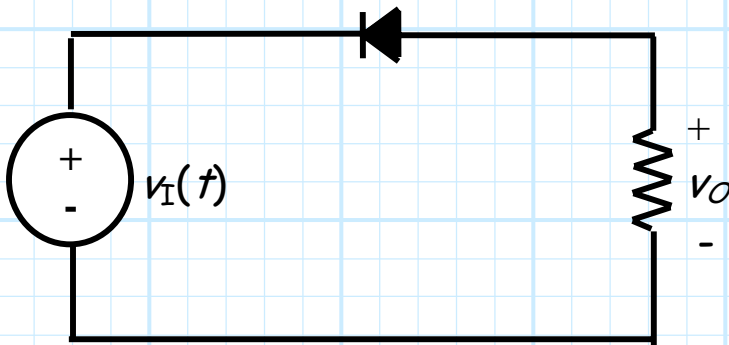


### Special Problem 3.5-1

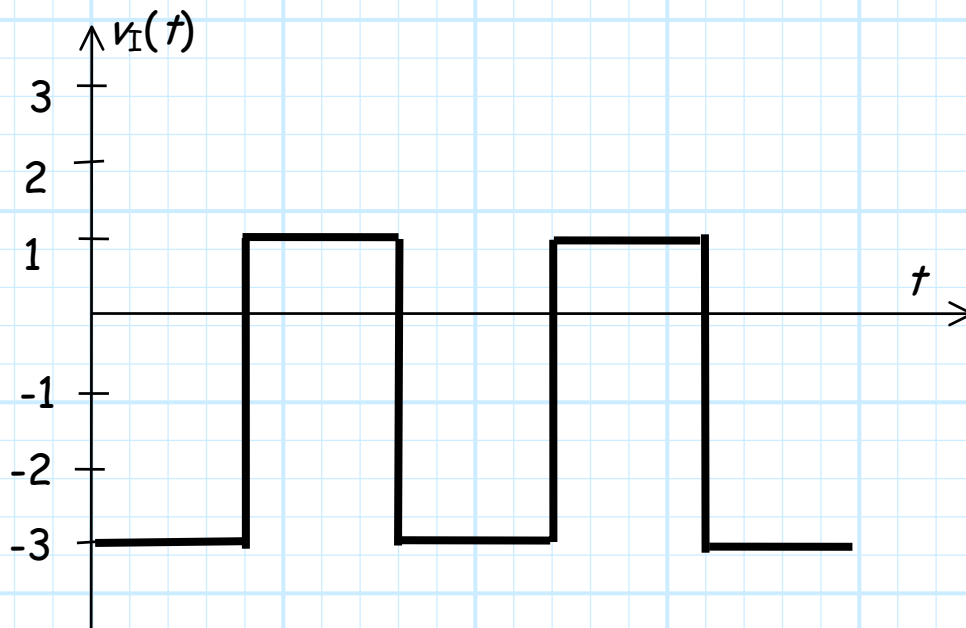
Consider **carefully** the rectifier below (note we have **not** studied **precisely** this circuit before!).

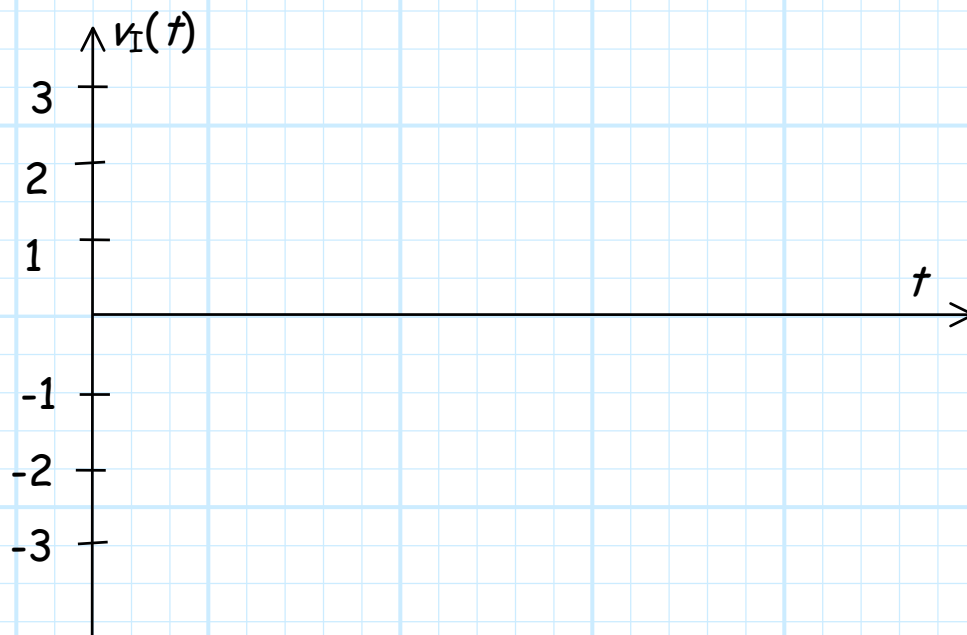
The diode is **IDEAL**.

1) Determine the transfer function of this circuit



2) For the **input** signal below, carefully sketch the resulting **output** signal (on next page).





3) Determine the **PIV** for **this** circuit and input signal (the answer is a numeric value!).