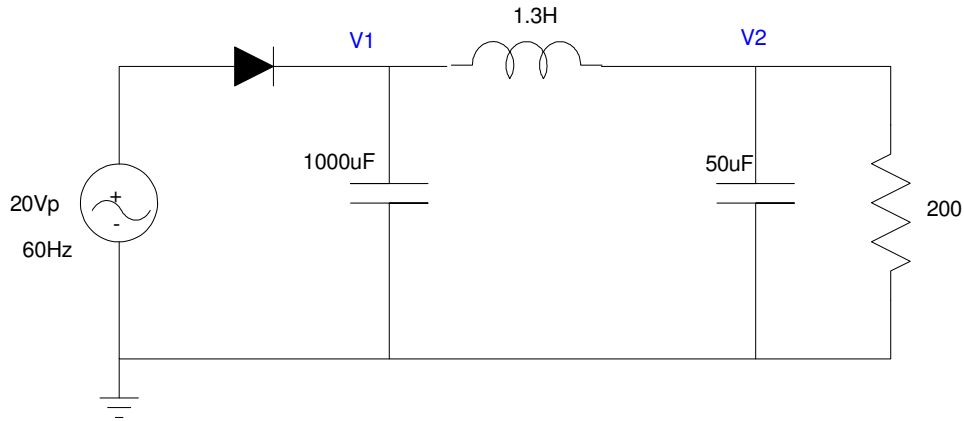


# ECE 343 - Homework #8

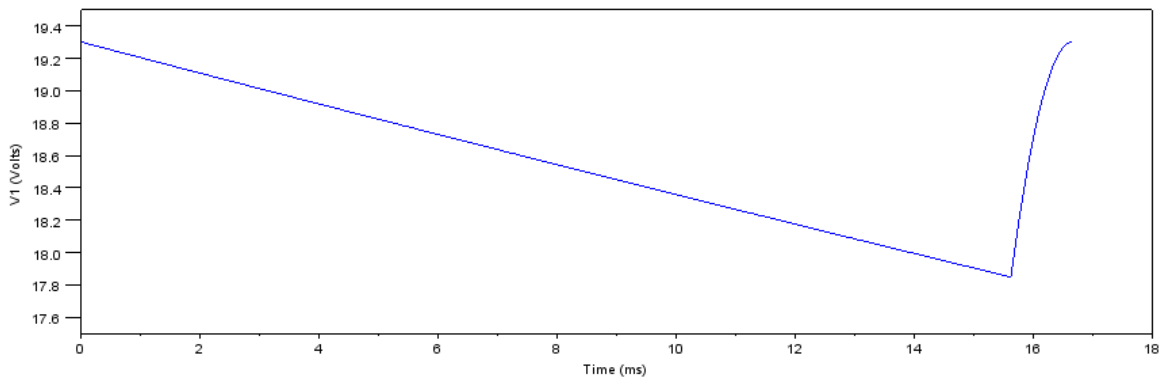
Circuit Analysis using Fourier Transforms - Summer 2018

An AC to DC covnerter from ECE 320 is as follows:



The voltage at V1 is approximately the following:

```
t = [0:0.001:1]' / 60;  
w0 = 2*pi*60;  
  
R = 200;  
C = 1000e-6;  
  
V1 = max(19.3*cos(w0*t), 19.3*exp(-t/(R*C)));  
-->plot(t,V1)
```



Determine  $V2(t)$  using Fourier transforms.