

In the Name of God

Quiz 3

Name:

Course: Power Electronics

Student Number:

1- In the converter below, show that the peak to peak ripple current of the inductor L is:

$$\Delta I = \frac{V_s k (1-k)}{f L}$$

Where f is the chopping frequency, V_s is the input voltage. (assumed that the current rises and falls linearly)



