1. (4 points) A flyback converter in continuous conduction mode takes 160V DC and converts to 3.3V DC. If the duty cycle is 0.40, calculate the turns ratio of the transformer. Assume an ideal switch and diode.

2. (3 points) The same flyback converter has a transformer magnetizing inductance of $40\mu H$. It switches at 1.0 MHz. For continuous conduction mode, calculate the <u>change</u> in input current, as the text handout calls Δi_{Lm} .

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Quiz 8
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3. (3 points) Calculate and plot the transistor switch <u>voltage</u> of the same flyback converter in continuous conduction mode.