Physics 116A

Home Work # 4
Posted on Feb 1, 2018
Due in Class Feb 8, 2018

§**Required Problems: Each problem has 10 points**

E.g. MB 19.16 means problem #16 on page 19 in the book by M. Boas, 3rd Edition.

1. MB 78.7

2. MB 78.8 { Hint: As a warmup, do the problem where the C and L are replaced by other resistances.} Here the L and R are in series and C is in parallel with the L +R. We should assume that the total potential drop across the circuit $V_T = V_R + V_L = V_C$ where V_L stands for the voltage drop across L etc. We should also assume that the total current branches off as $I_T = I_A + I_B$. The required impedance is given by $Z = V_T/I_T$

3. MB 78.10

4. MB 79.12 {Typo-alert: Here we should consider the two brackets closed on the left with missing ones. }

5. MB 88.7

6. MB 88.8

7. MB 88.15

8. MB 88.18

9. MB 95.4

10. MB 95.7

§**Recommended Supplementary problems: No scores**

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