University of Alabama Department of Physics and Astronomy

PH 102 Summer 2012

Potential Bonus for Exam 2

Instructions:

- 1. Solve the problem below for *potential* extra credit on Exam 2
- 2. If your score on this problem is greater than your lowest non-dropped problem from Exam 2, your score on this problem will replace that lowest-counted problem from Exam 2.
- 3. You may choose to ignore this problem without penalty.
- 4. This problem must be turned it at the start of the final exam, 8am on 3 August 2012.
- 1. (a) Find the reactance of the circuit at all frequencies below (symbolic formula). (b) Roughly sketch a plot of V_{in}/V_{out} versus frequency. (c) What might one use a filter like this for, given its output characteristics?

