

ECE503 Homework Assignment Number 2

Due by 8:50pm on Monday 30-Jan-2012

IMPORTANT: Please place your ECE mailbox number on all homework assignments. Your ECE mailbox number can be found on the course web page.

Make sure your reasoning and work are clear to receive full credit for each problem. Points will be deducted for a disorderly presentation of your solution. Please also refer to the course academic honesty policies regarding collaboration on homework assignments.

1. 4 points. Mitra 4.3.
2. 2 points. Mitra 4.22.
3. 3 points. Mitra 4.40.
4. 3 points. Mitra 4.42. You can use Matlab to verify your answer.
5. 3 points. Mitra 4.45. You can use Matlab to verify your answer.
6. 3 points. Mitra 4.64. You can use Matlab to verify your answer for particular values of α and β .
7. 3 points. Mitra 4.69. Use Matlab to verify your filter blocks the low frequency component.
8. 4 points. Mitra M4.3.