Answer all questions. Make sure that you explain all your steps and justify your answers. Each problem is worth of 10 points, split equally between sub-problems. The textbook is S. M. Ross *An Elementary Introduction to Mathematical Finance, 3rd Edition*.

32. Do Exercise 6.12 of textbook.
33. Do Exercise 7.2 of textbook.
34. Do Exercise 7.4 of textbook.
35. Do Exercise 7.5 of textbook.
36. Do Exercise 7.6 of textbook.
37. Do Exercise 7.9 of textbook.
38. Do Exercise 7.13 of textbook.
39. (5pts each) (a) Do Exercise 7.14 of textbook.  
   (b) Do Exercise 7.15 of textbook.  
   Note: In both parts 40(a), (b) you are asked to provide mathematical proofs/arguments.
40. (5pts each) (a) Do Exercise 7.17 of textbook.  
   (b) Do Exercise 7.18 of textbook.