**Engineering Economics Fall 1398**
**First Assignment**

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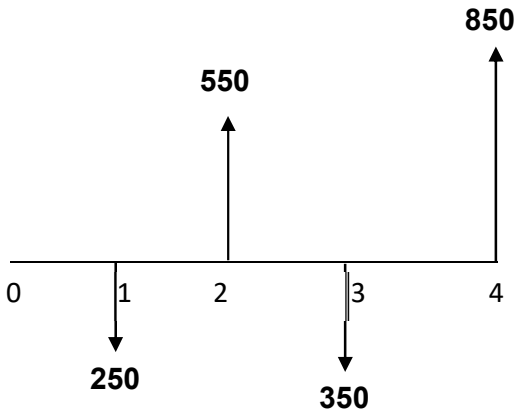
Consider a project with initial cost of 1000MT and the following 4-year cash flow that appears 4 times in this project. Interest rate is 7% for the first 4-year, 8% for the second 4-year, 9% for the third 4-year, and 10% for the fourth 4-year.




Numbers are in Million Tomans (MT)

a. Calculate future value of this project at the end of year 16.

b. Calculate future value of this project at the end of year 16 with annual, semiannual, quarterly, monthly, weekly, daily, and half-daily compounding (i.e., m =1, 2, 4, 14, 52, 365, and 730).

c. Calculate future value of this project at the end of year 16 with continuous compounding.

d. Provide a chart showing effect of varying compounding frequency (m) on future value of this project at the end of year 16. There is a similar chart in slide 17, chapter 4 of our course.

e. Assume that the time periods are in month in the above cash flow, repeat parts a, b, c, and d at the end of month 16. Interest rates are annually. For parts b and d, consider the two policies of 1) no interperiod interest, and 2) interperiod interest.

Please use Microsoft Excel for doing this assignment, and everybody must submit **his/her own solution** as a single Excel file with multiple worksheets **no later than Aban 16, 1398 only through LMS**.
Sending the assignment to my email is not acceptable.

Good luck
Esfahanipour
Aban 4, 1398