Applied Homework #3 BAFN 370 (Summer 2018)

* Work in groups of 2-3
* Assignment must be done in Excel and emailed to me: [joseph.french@unco.edu](mailto:joseph.french@unco.edu)
* Assignment due Thursday August 6nd by 11:59pm
* Do the problem below.

This is a classic retirement problem. A friend is celebrating her birthday and wants to start saving for her anticipated retirement. She has the following years to retirement and retirement spending goals:

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| --- | --- |
| Years until retirement: | 30 |
| Amount to withdraw each year: | $90,000 |
| Years to withdraw in retirement: | 20 |
| Interest rate: | 8% |

Because your friend is planning ahead, the first withdrawal will not take place until one year after she retires. She wants to make equal annual deposits into her account for her retirement fund.

1. If she starts making these deposits in one year and makes her last deposit on the day she retires, what amount must she deposit annually to be able to make the desired withdrawals at retirement?
2. Suppose your friend has just inherited a large sum of money. Rather than making equal annual payments, she has decided to make one lump sum deposit today to cover her retirement needs. What amount does she have to deposit today?
3. Suppose your friend's employer will contribute to the account each year as part of the company's profit sharing plan. In addition, your friend expects a distribution from a family trust 20 years from now. What amount must she deposit annually now to be able to make the desired withdrawals at retirement?

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| --- | --- |
| Employer's annual contribution: | $1,500 |
| Years until trust fund distribution: | 20 |
| Amount of trust fund distribution: | $25,000 |