

# An extra credit project

Up to four percentage points can be applied to your final exam marks if you complete a two to three page, double-spaced typed report in which you answer the following:

Plan for retirement: This project will focus on Individual Retirement Accounts (IRA) and will not take into account any employer contributions. Complete the following:

1. [1] Define a traditional IRA and a Roth IRA.
2. [.5] Find the median income for workers in the profession you plan to join. If you do not know your future profession assume you make \$50,303 a year (which is the median household income in the US in 2008 <http://www.census.gov/>). Determine if you should choose a traditional IRA or a Roth IRA and justify your choice.
3. [.5] Identify three financial institutions who are willing to provide you with a retirement account and choose the best one. Among the three make sure that you consider at least one bank and at least one credit union. Justify your choice.
4. Now that the account is set up in a particular financial institution, decide how to invest your retirement money.

Identify at least three investment funds offered by the financial institution that you choose in (c). Among the three funds you examine, make sure that you consider at least one Certificate of Deposit (CD) and at least one Index Fund (a type of mutual fund). Include in your summary the average effective annual rate of return for the past ten years of each fund as well as any regular fees or costs for each fund.

- (a) [.5] Assuming the effective annual rate of return does not change, how long will it take your money to double if you put all of it in a CD? an Index Fund? the third fund you discussed above? Show your computations (they can be handwritten in an appendix).
- (b) [.5] Assuming the effective annual rate of return does not change, how long will it take \$5000 to become \$25,000 if you put all of it in a CD? an Index Fund? the third fund you discussed above? Show your computations (they can be handwritten in an appendix).
- (c) [.5] Choose one of the funds that is not a CD. Assuming the effective annual rate of return does not change how much money do you put in the chosen fund, and how much in the CD so that your total effective annual interest rate is 5%? Show your computations (they can be handwritten in an appendix).
- (d) [.5] Assume you had \$5000 in 2000 and you put it a fund that matured in 2010 at \$7050. What was the effective annual rate of return for that investment? If you leave the \$7050 in that fund it should give the same rate of return, would you move the money to the account you set up in (d) or would you leave it be? Show your computations (they can be handwritten in an appendix).