Directions: Please answer the following questions and make sure your answer are legible. If you don’t show work and/or I can’t follow it, I won’t give partial credit. You may use a calculator. Good Luck.

This quiz is take home, so it is open book/note. However, you may not discuss your answers with anyone except Jackie Kaminski. (You may still discuss HW questions with anyone on Earth). This quiz is due at 4:00pm on Monday (not whenever you walk into class on monday, or the next time you attend class). Late quizzes will receive a 3 point penalty, and no quizzes will be accepted after the end of class on monday. You may turn in the quiz early under my office door (265 Hawthorn).

1. I ______________________________ certify that I have not discussed my work on this quiz with anyone (other than Jackie Kaminski). This includes in-person communication, electronic communication and all other forms of communication. I understand that violating this policy is considered Academic Dishonesty, and will be dealt with accordingly.

_________________________________________  __________________________________
signature                             date

2. (1 point) For this quiz you’ll be doing Your Retirement Planning. (Or the retirement plan of a hypothetical person you make up, I’ll never know.)

Fill in numbers you choose to use for each of the following. Notice that there are some restrictions on the range(s) you can use either to keep things reasonable and/or to make sure you don’t make the calculations on the quiz too easy/hard. You can be realistic, optimistic, or pessimistic on this quiz. You do NOT need to research numbers (but you are permitted to).

(a) Monthly income you need in retirement ________________ in today’s dollars. (Btw $800 − $5000)

   If you’re being realistic, keep in mind that some of your income will go to taxes. You may consider if you are still paying a mortgage vs owning a home in good repair, if you trust Medicare will be enough health insurance, if this is a number for just you v.s. you and a spouse, etc)

(b) Number of years until you retire _________________. (Between 20 and 50 years)

   We’re assuming you have absolutely no retirement savings right now for the purpose of the quiz

(c) Number of years you plan to be retired for _________________. (Btw 10 and 40 years)

   Sorry for the morbid question.

(d) Assumed inflation rate ____________________. (Between 2.8% and 3.7%)

(e) Assumed CARG for your retirement account _________________. (Btw 5% and 10%)

(f) Your company will match retirement contributions at __________ percent (Btw 25% and 100%) up to __________ percent of salary (Between 2% and 8%)

(g) Monthly Salary ________________ in today’s dollars. (Btw $900 and $9,000)

   Guess at monthly salary once you’re working. If you are working, feel free to lie to me. You may also choose to do a combination of you and a spouse if that’s how you are planning things.
3. (4 points) *We are assuming all calculations are in today’s dollars:*

Determine how much money you need in your retirement account on the day you retire to ensure you can make monthly payments of (2 a) to yourself if the account keeps earning (2 e) percent interest, and you need to make monthly payments to yourself for (2 c) years.  

*Hint, this is a chapter 4 question. You may ignore the effects of inflation once you’re retired.*

4. (6 points) Assuming you will contribute to your retirement account by letting your monthly contributions keep pace with inflation, and that all dollar values are in today’s dollars:

(a) Taking into account inflation from (2 d), what is the *real rate of return* on your retirement account that earns (2 e) percent interest?

(b) What monthly payments are needed so that you’ll have (3) dollars (in today’s dollars) in your retirement account in (2 b)?

*Hint: this is an 8.3 question*

5. (3 points) Assuming you make (2 g) as a monthly salary, and your company has the matching structure describe in (2 f): *Everything is still in today’s dollars.*

How much do you need to contribute to your retirement account each month so that your contributions and the company match combine to contribute (4 b) each month?  

*Hint, this is an 8.2 question*

6. (1 point) What will the monthly contributions to your retirement account (5) be in 2025 (after 10 years), assuming they keep pace with inflation (d)?

*Hint, this is an 8.3 questions*

*Congratulations, you just planned for your retirement.* More importantly, you know how to plan for your retirement at points in the future when you have accurate information on some of the answers to question 2. Note that our calculations assume your salary just keeps pace with inflation, and you get no other raises/promotions.