Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) ( 20 points) Suppose that US short-term bonds pay $2 \%$ and the market return is $5 \%$. Suppose the standard deviation of the market is $\sigma_{M}=2$ percentage points. Plot the diagram of the budget and indifference curves with expected return on one axis and $\sigma_{P}$ on the other axis. Briefly state how you plotted the budget line. Given your diagram, what percentage of your assets should be in the government bonds? State how you reached that conclusion.
2) (10 points) What is the endowment effect? Why do you think it holds?
3) (30 points) Copy the table into your answers and fill it in. Show all work. If there is no work, explain how you reached the conclusion.
4) (20 points) Draw a normal shaped MPL and APL diagram. Explain why it takes that shape.
5) (20 points) Draw a normal shaped MPL and APL diagram. Illustrate an increase in the amount of capital. Explain why the curve(s) moved as drawn.

| $L$ | Q | APL | MPL |
| :---: | :---: | :---: | :---: |
| 0 |  |  |  |
| 2 | 10 |  |  |
| 4 | 24 |  |  |
| 6 |  | 6 |  |
| 8 |  |  | 2 |
|  | 41 |  | 1 |
|  | 40 | 4 |  |

