Name: $\qquad$ .

## Preview: Chapter 1: The Measurement of Interest

Directions: Print out and complete, based on your reading of the text. If there are multiple sheets, staple together the top left corners (in the correct order). Turn in at the start of class on the date due. Do not submit answers on notebook paper or via email. No credit for late or incomplete preview assignments. Assignments may be turned in, in advance, to my mailbox in 233 MSB.

## §1.10: Varying interest

1. Read Example 1.17. Find the accumulated value of $\$ 5000$ at the end of 6 years if the effective rate of interest is $6 \%$ for the first 2 years, $5 \%$ for the next 2 years, and $3.5 \%$ for the third 2 years.
2. Read Example 1.18. Rework the problem if the investor earns $10 \%$ during the first year, $6 \%$ during the second year, and $-8 \%$ during the third year.
3. Read Example 1.19. Rework the previous problem if the returns given are continuous measures, i.e., forces of interest rather than effective rates.

## §1.11: Summary of results

Complete the following table.

| rate of interest | $a(t)$ | $[a(t)]^{-1}$ |
| :---: | :---: | :---: |
| or discount | the accumulated value of 1 at time $t$ | the present value of 1 at time $t$ |
| Compound interest |  |  |
| $i$ |  |  |
| $i^{(m)}$ |  |  |
| $d$ |  |  |
| $d^{(m)}$ |  |  |
| $\delta$ |  |  |
| Simple interest |  |  |
| $i$ |  |  |
| Simple discount |  |  |
| $d$ |  |  |

