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.

## §1.6: Present value

1. Define and (if applicable) give a formula for each of the following.
(a) accumulation factor
(b) discount factor
(c) discount function (Note: I will use the notation $(a(t))^{-1}$ instead of the book's $a^{-1}(t)$, which is usually interpreted to denote an inverse with respect to function composition.)
2. Give a formula for $(a(t))^{-1}$, for $t \geq 0$, in the case of
(a) simple interest:
(b) compound interest:
3. Read Example 1.7. Find the amount which must be invested at $5 \%$ per annum in order to accumulate $\$ 3500$ at the end of 10 years
(a) assuming simple interest.
(b) assuming compound interest.
