

Name: _____

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.

§1.1: Introduction

1. Define or describe each of the following.

(a) interest

(b) capital (*look this up elsewhere*)

2. Must capital and interest be expressed in terms of the same commodity? Give an example.

§1.2: The accumulation and amount functions

1. Define, describe, or give a formula for each of the following.

(a) principal

(b) accumulated value

(c) (amount of) interest

(d) (measurement) period

(e) accumulation function, $a(t)$

(f) amount function, $A(t)$

(g) I_n

2. What properties does an accumulation function (usually) possess?

(a)

(b)

(c)

3. The accumulation function is a special case of the amount function for which _____.

4. Sketch an example of each of the following types of amount functions.

(a) linear

(c) constant

(b) exponential

(d) not continuous

5. Read Example 1.1.

(a) If \$2000 is invested at time $t = 1$, under the same interest environment, find the accumulated value of the \$2000 at time $t = 3$. *Round to the nearest penny.*

(b) If \$37,892.45 is invested at time $t = 1$, under the same interest environment, find the accumulated value of the \$37,892.45 at time $t = 4$. *Round to the nearest penny.*