

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.

§1.4: Simple interest

1. Define

(a) simple interest

2. Give a formula for i_n in terms of i if interest accumulates with constant simple interest rate i .

3. A constant rate of simple interest implies a _____ effective rate of interest.

4. Sketch a graph of $a(t)$ (for $t > 0$) if $a(n) = 1 + in$ for $n = 0, 1, 2, 3, \dots$ and

(a) interest is credited proportionally over any fraction of a period.

(b) interest is accrued only for completed periods, with no credit for fractional periods.

5. Read Example 1.3. Assume that the investor leaves the money in the account for another two years, for a total of six years. Find $A(6)$, I_6 , and i_6 .

Appendix 1: Simple interest for fractional periods

1. A more rigorous development of simple interest starts with what property that we want simple interest to possess?
2. Explain this formula in words (complete sentences).