Name: \_

## **Preview: Chapter 3: Basic annuities**

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.

## §3.3: Annuity-Due

1. Define annuity-due.

2. For each of the following, give a time diagram, a formula, and then state what it represents in plain English.

(a)  $\ddot{a}_{\overline{n}}$ 

(b)  $\ddot{s}_{\overline{n}}$ 

3. State Formula (3.11) and explain why it's true using a time diagram.

4. State Formula (3.12).

5. State Formula (3.13) and explain why it's true using a time diagram.

6. State Formula (3.14) and explain why it's true using a time diagram.

7. State Formula (3.15) and explain why it's true using a time diagram.

8. State Formula (3.16) and explain why it's true using a time diagram.