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Main Topics and Chapters: Chapter 2 Bonds Types of cash flows Present Value

- 1. Time Value of Money
 - a. Important in Finance
 - b. We are always moving through time
 - i. Borrowing and lending
 - ii. Borrowing to have the BMW in 25 years
- 2. Extremely important in the midterm to know how to do PV
 - a. People mess up the one full period before the one they are supposed to use
 - b. No questions on supply of loanable funds
 - c. Write out your work
 - i. You don't have to but he won't give partial credit
 - d. Time
 - i. 365 Days in a year
 - ii. 30 Days in a month
 - iii. 90 Days in a Quarter
 - e. Effective Annual Yield is a place where people will lose points.
- 3. Always always always make a timeline
 - a. People typically score higher on midterms, and points will be given for drawing
- 4. Single Cash Flow
 - a. Present Value =
- 5. Multiple Cash Flows
- 6. Perpetuity
 - a. This will be on the midterm
 - b. Sum of individual pieces
 - c. PV of a perpetuity = C/R
- 7. Annuity
 - a. Need to do the C/R one period before you start to get paid out on something
 - b. New rule: the "R" in the formula has to be an effective annual rate (EAR)
 - c. When the world doesn't give you an EAR, you have to calculate it using quarterly, semiannually, and compounded.
 - d. EAR is one of the biggest reasons why people get a problem wrong on an exam***

- e. Key: if the word "compounded" comes up in the problem, you must get the appropriate effective rate for the appropriate period NOTE: if the word "Compounded" is in the interest rate, it means it is NOT an EAR, and therefore you cannot just use that rate with the word compounded in it to discount a payment one year from now! You MUST calculate the EAR first!
- f. Note: we don't learn the future value of an annuity because there's no reason to learn a new complicated formula when you can just find the present value of an annuity and then get the future value of that lump sum.

8. Compound

- a. If given compound rate you must find EAR
- b. EAR (1 +Rate per period)^number of periods a year 1
- 9. Why so many decimal places
 - a. 3rd decimal differences in the real world is REAL money
 - b. A few decimal places on a billion dollars is a lot of money.
 - c.