

Key to 1:25 Quiz: 2/1/12

Quiz: You would like to amass \$100,000 by four years from today. To achieve your goal, you plan to make the first of several quarterly deposits five months from today. You also plan for each subsequent deposit to be 2% larger than the previous one and to make your final deposit three years and eight months from today. After this final deposit, you will allow your account to earn interest until you withdraw the \$100,000 four years from today. How large must your first deposit be if the APR on your account equals 7% with monthly compounding?

Note: You don't have to solve anything, just set up the appropriate equations and fill in the correct numbers you would need to answer the question.

$$x4 \left(r \left(\frac{1}{12} \right) = \frac{.07}{12} \right) \quad \begin{matrix} +2 \\ +4 \\ +6 \end{matrix} \quad \text{10}$$

$$x4 \left(r \left(\frac{1}{4} \right) = \left(1 + r \left(\frac{1}{12} \right) \right)^3 - 1 \right) \quad \begin{matrix} +6 \\ +8 \end{matrix} \quad \text{10}$$

$$x4 \left(PV_{3\text{yrs}8\text{mo}} = \frac{100,000}{\left(1 + r \left(\frac{1}{12} \right) \right)^4} \right) \quad \begin{matrix} +2 \\ +4 \\ +6 \end{matrix} \quad \text{14}$$

$$x4 \left(FV_{3\text{yrs}8\text{mo}} = \left(\frac{C}{r \left(\frac{1}{4} \right) - .02} \right) \left(\left(1 + r \left(\frac{1}{4} \right) \right)^{14} - (1.02)^{14} \right) \right) \quad \begin{matrix} +4 \\ +6 \\ +8 \end{matrix} \quad \text{16}$$

=> solve for C

Note: Bonus WSJ Questions on back of page

WSJ1: The Federal Trade Commission intensified its crackdown on the booming debt-collection industry, announcing a \$2.5 million settlement with a company for allegedly

- a. charging interest rates that exceeded 100%
- b. harassing people while they were at work
- c. hiring agents who physically attacked some individuals who fell behind on agreed payments
- d. knocking on people's doors at 3 A.M. to harass them about overdue debts
- E. coercing borrowers into paying debts they no longer legally owed**

WSJ2: The Wall Street Journal reports that federal prosecutors are preparing to file criminal charges against former Wall Street traders at Credit Suisse Group alleging in order to boost their bonuses they

- a. traded among themselves at prearranged prices to inflate their trading volumes
- b. misstated the number of trades they had undertaken
- c. traded on material, non-public information
- d. "loaned" client balances to each other on the dates that bonuses were determined
- E. misstated the value of mortgage bonds**