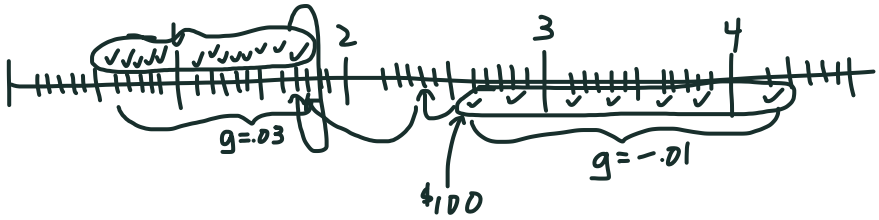
Quiz B for 9:45 Class: 7/17/14 Name Key

Note: If solving for anything other than the left-hand side of the equation, state which variable solving for.

Assume that seven month from today you make the first of a series of monthly deposits into an account with an APR of 6% where compounding occurs monthly. After your first deposit, subsequent deposits will grow by 3% each through your final deposit one years and eight months from today. You will make your first quarterly withdrawal from this account two years and seven months from today. Your first withdrawal will equal $100 and subsequent withdrawals will fall by 1% each through your final withdrawal four years and one months from today. Set up the calculations needed to determine how large you must make your first deposit into the account.



(15) $+5\left(r\left(\frac{1}{12}\right)=\frac{.06}{12}\right)$ (+3, +3)

(18) $+5\left(PV_{2yrs,4mo}=\left(\frac{100}{r\left(\frac{1}{4}\right)+.01}\right)\left(1-\left(\frac{1-.01}{1+r\left(\frac{1}{4}\right)}\right)^{7}\right)=A\right)$ (+3, +3, +7)

(12) $+5\left(r\left(\frac{1}{4}\right)=\left(1+r\left(\frac{1}{12}\right)\right)^{3}-1\right)$ (+7)

(12) $+5\left(PV_{1yr,8mo}=A\left(\frac{1}{1+r\left(\frac{1}{12}\right)}\right)^{8}=B\right)$ (+7)

(18) $+5\left(FV_{1yr,8mo}=\left(\frac{C}{r\left(\frac{1}{12}\right)-.03}\right)\left(\left(1+r\left(\frac{1}{12}\right)\right)^{14}-(1.03)^{14}\right)=B\right)$ (+3, +3, +7)

Set equal + solve for C