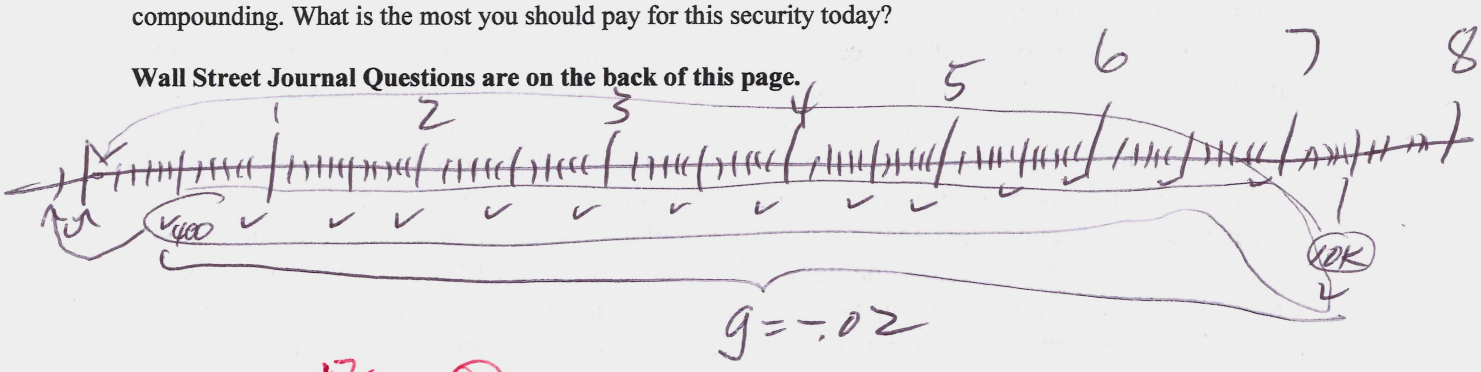
2/4/13

Quiz B for 2:30 Class: ~~1/30~~/13 Name Key

Note: On this quiz, you do not need to solve anything. Just set up all equations, plug in all the numbers you would need to solve the equations, and indicate which variable you are solving for (in each equation) if you are not solving for the equation itself.

Assume a security matures for $10,000 seven years and five months from today. Assume also that the security makes semiannual payments with the final semiannual payment also occurring seven years and five months from today. The next payment will equal $400 and subsequent payments will fall by 2% each. Finally, assume that the APR on investments with comparable risk equals 4.5% per year with quarterly compounding. What is the most you should pay for this security today?

Wall Street Journal Questions are on the back of this page.



+4 ($r(\frac{1}{4}) = \frac{.045}{4}$ +2 (8)

+4 ($r(\frac{1}{2}) = (1+r(\frac{1}{4}))^{2} - 1$ (8)

coupons

+4 ($PV_{\text{-1mo}} = \left(\frac{400}{r(\frac{1}{2}) - (-.02)}\right)\left(1 - \left(\frac{(1+(-.02))}{(1+r(\frac{1}{2}))}\right)^{15}\right)$ +2 +2 +4 (12)

or $(1-.02)$

+4 ($FV_0 = PV_{\text{-1mo}}(1+r(\frac{1}{2}))^{\frac{1}{6}} = A$ +4 (8)

Maturity Value

+4 ($PV_0 = 10{,}000\left(\frac{1}{1+r(\frac{1}{2})}\right)^{14\frac{5}{6}} = B$ +2 +4 (10)

+4 (Value = A + B