Homework #2

Due Monday 2/17

1. (10 points) Suppose $50000 is invested at 5% APR. Find the value of the investment after 23 months in various situations. I'll do quarterly for you.

Compounding	Formula	Value of t	Future Value	Doubling Time
Annually				
Semiannually				
Quarterly	$F_4(t) = 50000\left(1+\frac{0.05}{4}\right)^{4t}$	$t = 1.75$	≈ 54542.53 dollars	14 years
Monthly				
Continuously				

2. (5 points) How much will a $100 investment, compounded quarterly at 5% APR yield in 10 months? How long will it take to double your investment?

3. (5 points) How much will a $100 investment, compounded continuously at 5% APR yield in 10 months? How long will it take to double your investment?

4. (5 points) What is the APY for an investment that pays 3% APR compounded quarterly? (If you need to, go to section 1.6 in the book and look up the formula for APY)

5. (5 points) What is the APY for an investment that pays 3% APR compounded continuously? (If you need to, go to section 1.6 in the book and look up the formula for APY)