

DATE: _____

3.6 Mathematics of Finance (*Target 3G*)

1. A man invests \$10,000 in an account that pays 8.5% interest per year, compounded quarterly. What is the amount of money that he will have after 3 years?
2. A sum of \$5000 is invested at an interest rate of 9% per year. Find the time required for the money to double if the interest is compounded:
 - (a) Semi-annually
 - (b) Quarterly
 - (c) Continuously
3. How long will it take for \$8000 compounded monthly at 4% to grow to \$10000?
4. How much money should you save in an account paying 5% interest compounded monthly if you want to have \$6000 in 6 months?
5. A necklace is appraised at \$6300. If the value of the necklace has increased at an annual rate of 7%, how much was it worth 15 years ago?