

INTEREST WORD PROBLEMS WORKSHEET 2

1. Suppose \$5000 is put into an account that pays 4% compounded continuously. How much will be in the account after 3 years?
2. If interest is compounded continuously at 4.5% for 7 years, how much will a \$2000 investment be worth at the end of 7 years?
3. If \$8000 is invested in an account that pays 4% interest compounded continuously, how much is in the account at the end of 10 years?
4. Congratulations!! You have just won \$50,000! You decide to invest your money and the bank presents you with two investment options. You may either invest your \$50,000 at 5% interest, compounded monthly, for a period of ten years OR you can invest that \$50,000 at 5% interest, compounded continuously, for ten years. Which investment option will yield a greater profit?
5. Mildred plans to put her graduation money into an account and leave it there for 4 years while she goes to college. She receives \$750 in graduation money that she puts it into an account that earns 4.25% interest compounded semi-annually. How much will be in Mildred's account at the end of four years?
6. Daniel and Adam put \$5000 in the bank in 1987. They have been getting 2% interest compounded annually.
 - a. What will their value be in 2010?
 - b. If they had earned interest compounded continuously, how much less or more would they have?
7. If \$ 4,000 is invested in an account paying 3% interest compounded continuously, what is the balance after 7 years?
8. If you invest \$ 6.16 in an account paying 12% interest compounded continuously for 100 years, and that is all you have to leave your children as an inheritance, what will the final balance be that they will receive?