

FUTURE VALUE WS #1

1. How might these words apply to what is in this lesson?
2. Jimmy invests \$4,000 in an account that pays 5% annual interest, compounded semiannually. What is his balance, to the nearest cent, at the end of 10 years?
3. On Olga's 16th birthday, her uncle invested \$2,000 in an account that was locked into a 4.75% interest rate, compounded monthly. How much will Olga have in the account when she turns 18? Round to the nearest cent.
4. Samantha deposits \$1,500 into the Park Street Bank. The account pays 4.12% annual interest, compounded daily. To the nearest cent, how much is in the account at the end of three non-leap years?
5. Joanne deposits \$4,300 into a one-year CD at a rate of 4.3%, compounded daily.
 - a. What is her ending balance after the year?
 - b. How much interest does she earn?
 - c. What is her annual percentage yield to the nearest hundredth of a percent?
6. Mike deposits \$5,000 in a three-year CD account that yields 3.5% interest, compounded weekly. What is his ending balance at the end of three years?
7. Rob deposits \$1,000 in a savings account at New York State Bank that pays 4.4% interest, compounded monthly.
 - a. How much is in his account at the end of one year?
 - b. What is the APY for this account to the nearest hundredth of a percent?
8. How much more does \$1,000 earn in eight years, compounded daily at 5%, than \$1,000 over eight years at 5%, compounded semiannually?
9. If \$3,000 is invested at an interest rate of 4.8%, compounded hourly for two years, what is the ending balance?
10. Mike and Julie receive \$20,000 in gifts from friends and relatives for their wedding. They deposit the money into an account that pays 4.75% interest, compounded daily.
 - a. Will their money double in fourteen years?
 - b. Will their money double in fifteen years?
11. Lindsay invests \$80 in an account that pays 5% annual interest, compounded monthly. Michele invests \$60 in an account that pays 8% annual interest, compounded weekly.
 - a. Whose balance is greater after one year?
 - b. Whose balance is greater after twelve years?