Name: _____ Date: _____

1. _____ interest is calculated by applying the interest rate to the principal only, not to interest earned.
   A) Compound
   B) Simple
   C) Quarterly
   D) Annual

2. The Rule of 72 states that the estimate for doubling time = _____.
   A) $\dfrac{72}{APR}$
   B) $\dfrac{72}{APY}$
   C) $\dfrac{APY}{72}$
   D) $\dfrac{APR}{72}$

3. Unlike APR, APY tells us the actual percentage growth per year.
   A) True
   B) False

4. Assume a six-month CD purchased for $5000 pays simple interest at an annual rate of 9.5%. How much interest does it earn?
   A) $2850
   B) $950
   C) $237.50
   D) $118.75

5. Assume a 30-month CD purchased for $2500 pays simple interest at an annual rate of 6%. What is the balance at maturity?
   A) $375
   B) $2875
   C) $2950
   D) $2680

6. Suppose you invest $5000 in a savings account that pays an APR of 4%. If the interest is compounded monthly, what is the balance in the account after 10 years?
   A) $5203.71
   B) $8072.64
   C) $7454.16
   D) $5169.19

7. At age 25, you start work for a company that deposits $10,000 into a retirement account that pays a monthly interest rate of 1.1%, and interest is compounded monthly. If you retire at 65, what is the balance in this account?
   A) $1,907,895.94
   B) $1,140,286.20
   C) $1,690,656.85
   D) $2,036,221.94

8. Principal is the amount you have in your account.
   A) True
   B) False

9. Rob bought a nine-month CD for $2000. He said that at maturity it paid $106.50. Assuming this was simple interest, what was the APR?
   A) 5.3%
   B) 6.5%
   C) 4.0%
   D) 7.1%

10. The _____ of an investment is the value of that investment at some specified time in the future.
    A) present value
    B) future value
    C) annual percentage yield
    D) doubling time

11. What is the future value of a 5-year investment of $3000 at an APR of 7% compounded monthly?
    A) $4252.88
    B) $3034.21
    C) $4050.00
    D) $1252.88

12. What is the present value of an investment that will be worth $5000 at the end of ten years assuming an APR of 8% compounded monthly?
   A) $4678.57
   B) $3356.05
   C) $1921.79
   D) $2252.62

13. Suppose you have invested $1500 at an APR of 8%. Use the Rule of 72 to estimate how long it will be until your investment reaches $3000.
   A) 6 years
   B) 7 years
   C) 8 years
   D) 9 years

14. A colleague tells you that their savings account doubled after 15 years. Use the Rule of 72 to approximate the APR on their account.
   A) 4.5%
   B) 4.8%
   C) 5.7%
   D) 7.2%

15. Consider an investment of $5000 at an APR of 5% compounded monthly. Use the formula that gives the exact doubling time to determine exactly how long it will take for the investment to double. Give your answer in years and months.

16. Suppose a CD advertised an APY of 8%. Assuming the APY was the result of monthly compounding, find the APR.