

Name: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Score: \_\_\_\_\_

All Interest:  $F = P + I$

Compounding:  $F = P(1 + i)^m$

where  $i = \frac{r}{n}$  and  $m = t \cdot n$

1. (2 points) Solve for P:  $\$3300 = P + P(0.05)(2)$
2. (3 points) Find the annual rate of return for an initial investment of \$10,000 worth \$17,500 after a period of 6 years and 6 months, if the interest is compounded quarterly.
3. (5 points) Suppose \$1000 is deposited in an account paying 6% annual interest.
  - a Find the future value after 10 years with simple interest.
  - b Find the future value after 10 years with compound interest.
  - c Find the amount of interest earned for a and b.
  - d Briefly explain why one is higher than the other.