

ASSIGN #1 MP 2 COMPOUND INTEREST F.LE-A.1, 2
ALGEBRA

In problems 1-3, compare the amount you have if the money were compounded annually versus quarterly
Write out and solve 2 equations per problem

1. \$5,000 at 10% for 5 years
2. \$2,000 at 12% for 3 years
3. \$1,000 at 14% for 30 years

In problems 4-6, compare the amount of money you have if the investment is compounded annually versus daily.
Write out and calculate 2 equations per problem

4. \$1,000 at 8% for 5 years
5. \$2,000 at 12% for 3 years
6. \$5,000 at 12% for 20 years

Fill in the blanks for problems 7-12.

| Compounding Period (n) | Principal (P) | Yearly rate (r) | Time (t) | Period rate (r/k) | Number of periods, (kt) | Total Amount (A) | Total amount earned (I) |
|------------------------|---------------|-----------------|----------|-------------------|-------------------------|------------------|-------------------------|
| 7. Annually | \$1,000 | 9% | 5 years | | | | |
| 8. Semiannually | \$1,000 | 9% | 5 years | | | | |
| 9. Quarterly | \$500 | 8% | 3 years | | | | |
| 10. Monthly | \$350 | 12% | 5 years | | | | |