

# MasterMath

Name \_\_\_\_\_

## Simple and Compound Interest

Date \_\_\_\_\_

1. Fill in the blanks:

| Item Purchased | Interest   | Principal    | Rate, per year | Time      |
|----------------|------------|--------------|----------------|-----------|
| watch          |            | \$250.00     | 12%            | 2 years   |
| car            |            | \$4,785.00   | 6%             | 18 months |
| TV             | \$1,773.00 | \$985.00     |                | 10 years  |
| house          |            | \$125,000.00 | 5%             | 30 years  |

2. Fill in the blanks:

| Item Purchased | Balance     | Principal    | Rate, per year | Time    |
|----------------|-------------|--------------|----------------|---------|
| dinner         | \$48.96     | \$36.00      |                | 2 years |
| car            | \$80,500.00 |              | 15%            | 5 years |
| TV             |             | \$600.00     | 3%             | 2 years |
| house          |             | \$225,000.00 | 4.25%          | 20      |

3. You want to buy a car in a year, and have budgeted \$4000 for the purchase. Bobby's Bank has a promotional Savings Account that pays interest of 6% compounded annually. How much would you need to put in the account today in order to have \$4,000 to buy the car in a year?




4. You have \$3000 to invest in a savings account, and have found two bank offers that seem attractive. Bobby's Bank offers Simple Interest of 5%. Betty's Bank offers interest of 5%, compounded annually. Fill in this table to help decide which offer makes more sense to you.

|                     | Balance after 1 year | Balance after 2 years | Balance after 3 years | Balance after 4 years | Balance after 5 years |
|---------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>Bobby's Bank</b> |                      |                       |                       |                       |                       |
| <b>Betty's Bank</b> |                      |                       |                       |                       |                       |

5. Your parents agree to lend you the money to purchase a phone that costs \$495. You agree to pay them back, with interest of 5%, on your birthday in 6 months. Your grandmother always gives you \$500 on your birthday. You don't know if the \$500 will be enough to pay back your parents. How much will you owe your parents in 6 months?