

The “Rule of Seventy-two” and Basic Personal Saving: It Pays to Save!

When it comes to making major purchases or retiring, many people rely on bank loans and Social Security payments. Unfortunately, bank loans must be repaid with interest, and Social Security payments are often not enough for daily living expenses.

The best way to make major purchases and retire with security is to save. Saving can never start too early. Many parents open savings accounts for their children in infancy. A young person without a bank account can open one with a fairly small initial deposit. Bank accounts are worthwhile means of saving money for two reasons: (1) bank accounts are secure (unlike a piggy bank which can be stolen); and (2) bank accounts earn interest.

Interest is the money a bank pays a customer for keeping her or his money in the bank. Banks make money by lending the money deposited by customers. For example, a bank customer deposits \$1,000.00. The bank loans this amount to a borrower at a rate of 6% interest. In exchange for use of this money, the bank shares a portion of the loan’s interest with the depositor. Depending on the size and type of the depositor’s account, paid interest rates can vary between .25 and five percent.

Simple Example:

1. Lucretia receives \$1,000.00 in graduation gifts.
2. Lucretia deposits her \$1,000.00 into a savings account at Acme Bank.
3. Acme Bank grants Lucas a loan of \$1,000.00 to purchase a used car.
4. Lucas repays the \$1,000.00 loan at an interest rate of 6 percent (\$60.00).
5. Acme Bank keeps half of the interest for its overhead costs and profit (\$30.00). The other half of the interest is paid to Lucretia (\$30.00).
6. At the end of the year, Lucretia has \$1,030.00 in her bank account rather than \$1,000.00.

Here is where “compound interest” comes into the picture. It might be easy to assume that so long as Lucretia keeps her money in the bank, she will continue earning \$30.00 a year in interest. However, she will actually earn much more. Why? Lucretia will earn more because at the end of the year, she has \$1,030.00 in her savings account, not just \$1,000.00. The following year, because Lucretia’s account contains \$1,030.00, she will earn \$30.90 in interest. Therefore, after two years, Lucretia will have \$1,060.90 in her account. The third year, Lucretia will earn \$31.83 on this amount of \$1,060.90. This phenomenon is known as *compound interest* because the interest compounds upon itself year after year.

The “rule of 72” is a formula for determining how long it will take for a depositor to double her or his money. Seventy-two, divided by the interest rate, equals the number of years it will take for a deposit to be doubled. At 3% interest, Lucretia’s original deposit of \$1,000.00 will be worth \$2,000.00 in 24 years.

$$72 \div 3 = 24$$

Saving money gets even better. Remember that Lucretia’s deposit has not occurred in a vacuum. Lucretia is working and depositing \$100.00 of each weekly paycheck into her savings account. Saving \$100.00 a week amounts to \$5,200.00 each year. Additionally, these weekly deposits are earning compound interest over time. At the end of the year, as Lucas is making the last payment on his \$1,000.00 loan, Lucretia has over \$6,300.00 in her savings account. If Lucretia keeps her money in her bank account and continues saving \$100.00 each week, she will have nearly \$12,000.00 after just two years. By leaving her \$1,000.00 alone at 3% interest, Lucretia’s account will contain \$2,000.00 after 24 years. By depositing an additional \$100.00 every week, Lucretia’s account will contain over \$180,000.00 after 24 years.

It really does pay to save!

Name: _____ Date: _____ Class Period: _____

Examine your own savings account or the savings account of a willing friend or family member.

- How much money is currently in this account? _____
- What is the interest rate being paid on this account? _____
- How long will it take for the current amount to be doubled? _____

Discover or create a mathematical formula for determining compound interest. _____

It is recommended that a person set aside at least ten percent of her or his income in a savings account. Look at your pay stubs or the pay stubs of a willing friend or family member.

- How much, on average, is earned in a week? _____
- What would 10% of amount this be? _____
- How much might be saved in a year? _____

You now understand that maintaining a savings account is a lucrative way of earning extra income. Examine the phrase “the rich get richer and the poor get poorer” in light on this reality. Think about how and why it might be easier for a person with a larger income to save more money than a person with a smaller income. _____

