

Investments

2 Corinthians 9:11: You will be made rich in every way so that you can be generous on every occasion, and through us your generosity will result in thanksgiving to God.

Mathew 22: 21: Then he (Jesus) said to them, "Give to Caesar what is Caesar's, and to God what is God's."

Introduction

God has given people the opportunity to invest. Investing allows people to put money to work. Through the process of compound interest hundreds of dollars can grow to thousands, and thousands to hundreds of thousands over a period of time. Taxes on the other hand can be one of the main enemies for investors. Though it is important to pay your taxes it also takes away your returns. In the US there are three main types of taxes that directly affect investment returns. The first kind of tax is called short term capital gains, which is applied to all positive returns in investments that are held one year or less. The second type of tax is called long term capital gains, which are applied to all positive returns in investments that are held for more than one year. The third type of tax affects everyone and that is income tax. Interest earned on money market accounts, CDs and savings accounts are taxed in your respected income tax bracket. With this knowledge let us see how an investment can grow.

Questions

Instructions: Complete the following problems. Show work.

Background: You leave high school and are working 40 hours a week making \$11.00 an hour at TGI Fridays. In a year you earn \$22,880. You take the standard deduction of \$5350. So your taxable income is \$17,530 and that puts you in the 15% tax bracket.

- 1) a) Since you took Precalculus you know you should invest, so you place \$1000 in a low risk money market account that earns 2.75% interest compounded monthly. How much interest have you accumulated at the end of one year?

b) Also, calculate the annual percentage rate (APR) of this account? (The APR is different than the rate in that it takes into account additional cost or interest obtains through compounding. Use the formula $APR = I/P \times 100$, where I is the total interest earned and P is the principle.)

b) How much interest income would you receive after paying 15% income tax on that amount?

c) Determine your new APR after taxes.

- 2) a) Suppose you invested \$5,000 in a moderate risk mutual fund that has an annual rate of 8%. How much would your investment be worth after 5 years compounded annually?
- b) If you sold your investment in 5 years you would have to pay long term capital gains of 15% on your gains. How much would your investment be worth after taxes?
- c) How long would it take you to triple your investment, before taxes?
- d) If you needed to double your investment, before taxes, in 5 year, what would the rate of this mutual fund need to be?
- 3) a) Suppose you invested \$12,500 in another riskier mutual fund that happens to double your investment in 4 years. What was the rate of this mutual fund?

Reflection

Instructions: If there is time, discuss with those next to you the following question and write a short summary of what was discussed.

5 (thoughtful reflection; good grammar) **4** (adequate reflection; and/or okay grammar)
3 (little thought and/or poor grammar) **2** (little thought and poor grammar)

What have you learned about investments and taxes? Explain.
