

## Retirement

### Matthew 25: 14-18 The Parable of the Talents

<sup>14</sup>"Again, it will be like a man going on a journey, who called his servants and entrusted his property to them. <sup>15</sup>To one he gave five talents<sup>[a]</sup> of money, to another two talents, and to another one talent, each according to his ability. Then he went on his journey. <sup>16</sup>The man who had received the five talents went at once and put his money to work and gained five more. <sup>17</sup>So also, the one with the two talents gained two more. <sup>18</sup>But the man who had received the one talent went off, dug a hole in the ground and hid his master's money.

### Introduction

It is truly important that we use our gifts (talents) wisely and to their fullest to help build up God's kingdom. Saving for retirement is another reason to invest. Most people use some sort of tax deferred account, like a 401K, IRA and other annuities to help them realize their retirement goals. These accounts are very popular because they allow individuals to sell and buy stocks without paying taxes on the gains until they reach retirement age. To many this is a great benefit, since we know that taxes can decrease returns on investments. The reason to save for retirement is because it allows you to have freedom to live a comfortable life in your "golden years" without the burden of relying on others for your financial well being. The reason to start saving early is because the earlier you start the less money and effort you have to put forth to meet your financial goals later on in life.

### Questions

Instructions: Complete the following problems. Show work.

Background: You are still in high school and have a part time job. Since you earn some income you are eligible to open an IRA. You choose a Roth, because this will allow you to pay taxes on the money you are investing now so you don't have to pay taxes on it in the future.

- 1) a) With your job you are able to put in 100 dollars a month starting at age 17 and you plan on continuing this trend till you retire at the age of 65. Your investment has an average rate of 6%. Find how much your investment is worth when you retire at age 65. (Use the following formula  $FV = R \frac{(1+\frac{r}{n})^{tn}-1}{(\frac{r}{n})}$ , where R is the periodic payments, r is the rate, n number of compounds, t is the time in years and FV is the future value.)  
  
b) How much would your investment be worth at age 65 if you stopped contributing at age 50? (Make sure you take into account that your balance at age 50 is still accumulating interest compounded annually at a rate of 6% per year.)

c) How much would your investment be worth if you began contributing at age 21 and stopped at age 65?

d) Compare the last two scenarios, which one gives you the most money at age 65? Explain why you think that is.

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e) Suppose you do not start saving for retirement until you are 32 year old. How much would you have to contribute each month to your retirement account at 6% if you wanted to accumulate \$333,737.00 at age 65?

f) Compare your total investment made in a 48 years in part a) with the total investment made in 33 year in part e). What do you notice about these amounts and the time it takes to reach the same goal of \$333,737.00?

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2) a) Beside taxes, another enemy of retirement accounts is inflation. Inflation is an upward movement in the average level of prices. An example of inflation would be the price of soda. If a can of soda cost \$0.25 in 1987 and \$0.75 in 2010, the price went up (inflation). What was the annual rate of inflation for a can of soda during this time period if it is compounded annually?

b) Traditionally, the annual rate of inflation is 3%. Was this true with the price of a can of soda?

