Two weeks ago my family had a great loss. My aunt which I loved very much passed away. In her will she left me $10,000 but, I could only receive the money when I was 25. In the ten years I have I would like to get the most interest I can get. I will use tables and graphs to find the best way to invest my money.

My parents have told me about a plan called simple interest. With this plan the interest is not added on when more interest is given. I will get 5% interest per year. To find the amount of interest I would get with the simple interest plan I would use this formula I=PRT. The P stands for principal, R rate, and T time. Below is the table for simple interest I use that formula to find the data for this graph.

Year   Total Amount
1 10,500
2 11,000
3 11,500
4 12,000
5 12,500
6 13,000
7 13,500
8 14,000
9 14,500
10   15,000

Next is a graph for for simple interest.

As I graphed the point I found out that all the points lay on the same line. Some now I can find the equation for the line. I want to find the equation for line so first I have to find the slope. I use the formula m=(y2-y1) (x2-x1). The two points I picked where (1,10500) and (3,11500) I substituted the right numbers in their place and i found the slope to be 500. nOPw I have to find the y intercept so I used the formula y = 500 (x) + b now I take one of my points and substituted it in for the x and the y of the formula now it looks like 105000 = 500 (1) + b. Now I can work it out like a normal problem. My y intercept of b is 10,000 because at the (0,10000) point the line crosses the y axis. So now I can write the equation for this line y = 500x + 10000. This is the equation for the line I have graphed.

In this problem the m was the interest for each year and the total amount added and the b was the starting amount which was 10,000

Netzt i would like to look in to compound intrest at 5% per year for 10 years. Compound intrest means that you get the intrest you made added on when the figure your

intrest for the year. So if you had 10500 for the first year you would get 11,025. I got this by using the formula I=(10500) (.05) (1)=11025. From this you can see the intrest added in and the multiplied. I am going to make a graph for the 10 and hor mutch money you will have with the compound intrest.

As you can see from the line graph the points don't lie on the same