

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### GETTING RICH WITH TIME?

You have just stepped into a time machine. Back you go to 1971. You step out of the machine into a time when rock and roll hits include *ABC* by Jackson Five, *My Din-A-Ling* by Chuck Berry and *I Shot the Sheriff* by Eric Clapton but you could only get it on vinyl records or reel-to-reel tapes. You wear bell-bottom pants, fringe vests and big hair. TV only has three channels but you get to watch great shows like *All in the Family*, *Happy Days* and *Charlie's Angels*. You can only watch movies in a movie theater and McDonalds is just getting started. There are great cars that use gallons of gas per mile but you don't get to pump your own gas. There are no cell phones or calculators and the first computers with 4kB to 48kB of memory were just appearing. Groovey Times!!

Your plan is to go back and make as much money as possible, put it in the bank and wait for it to grow. You can only stay for 2 weeks before you have to come back and since you are underage your career choices are limited.

You have gotten your first paycheck. You worked 71 hours at McDonalds but since it is a minimum wage job you were only paid \$1.57 an hour.

Calculate your pay check total:

Now what to do with it? Save it of course. This is the 70's and banks are paying 5 times the interest on savings accounts that they are today.

First compare banks changing the rates to like terms, then rank them highest rate to lowest:

Institution	Rate	Rank
Republic Savings & Loan	5.2%	
M & I Bank	5 $\frac{3}{8}$ %	
Home World Savings	5.225	
Seafirst Bank	5 $\frac{1}{4}$ %	
Banner Bank	5.025	

Using only the simple calculators, slide rule, mental math or your fingers & toes (this is the 70s after all) answer the following questions. Use your very best rate and the Simple Interest Formula.

$$I = prt$$

How much will you have after one year?

If you keep this money in the account for four (4) years how much will you have?

Remember, simple interest is only calculated on the original deposit amount. Can you develop a formula to simplify finding your balance over the years?

When you go to withdraw your savings upon your return to 2013, and the bank has kept the interest the same, how much will you have?

Your goal was to have a \$1000.00 dollars, How much interest did you need to get there?

What can you conclude about your (this) plan?

What could you do differently (given the constraints) that would have made you more money?

<https://wa-appliedmath.org/>