Name	Date
Real World Math	Period

# Unit 7 Final Exam Review Math & Finances

### Part I: Checking Accounts

- 1. It's mid-February and you just remembered to enter your checking account information into the register. At the end of January, your balance was \$845.54.
  - a. Write both of the checks from this month so far (2 pts each)
  - b. Record all of the information in the checkbook register in <u>chronological</u> <u>order</u>. (10 pts total)

### The following deposits were made so far this month:

- 2/9 You made \$40 shoveling driveways during the last snowstorm.
- 2/5 You deposited a \$74.23 paycheck from your part-time job (1/29-2/4)

# The following ATM (Automatic Teller Machine) withdrawals were made this month:

2/3 You withdrew \$30 before you went to the movies.

# So far this month, you wrote the following checks:

- 2/8 Check #101 to FYE. Your favorite artist just came out with a new album that cost \$18.83.
- 2/6 Check #100 to CVS. You picked up your film from winter vacation that cost \$20.00.

Your Name		45-2345/2230	100
Address		Date	
Pay to the			
Order of		\$	
			Dollars
Bank Info		¥	
For			
#######################################	0100		
Vous Name		45 2245/2220	101
Your Name Address		45-2345/2230	
		45-2345/2230 Date	
Address Pay to the		Date	
Address			
Address  Pay to the  Order of		DateS	
Address  Pay to the  Order of	7	DateS	
Address  Pay to the  Order of		DateS	

Check No.	Date	Transaction Description	Payment/ Debit	Deposit/ Credit	Balance

#### Part II: Compound vs. Simple Interest

For questions 2a-e, use the compound & simple interest formulas. If necessary, round your answers to the <u>nearest cent</u>. (3 pts each)

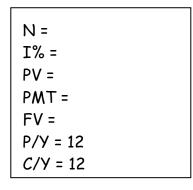
Compound Interest—7%	Simple Interest—7%
$A = P(1 + r)^{\dagger}$	A = P + P(r)(t)

- 2. You are going to invest \$1,700 in a bank that offers 7%.
  - a. The first account offers compound interest.
    - → How much money would you have saved after 1 year?
    - → How much money would you have saved after 10 years?
  - b. The second account offers simple interest.
    - → How much money would you have saved after 1 year?
    - → How much money would you have saved after 10 years?
  - c. Which account will offer you more interest after 10 years? How much more would you save if you choose that account?
  - d. What if you deposited \$1,700 in the first account that offers 7% interest? If you wanted to save up \$5,000, estimate how long it will take (round to the nearest year).
  - e. Give 2 financial examples where you would pay compound interest:

## Part III: The TVM Solver on the Graphing Calculator

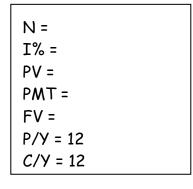
Use the TVM Solver on the graphing calculator (APPS $\rightarrow$ 1 $\rightarrow$ 1) to answer questions 3-5. Remember if it is money leaving you, it should be negative. If it is money you are getting, it should be positive. Don't forget that you press Alpha Enter to solve for the unknown variable. If necessary, round your final answers to the <u>nearest cent or tenth</u> of a month or payment.

3. You bought a new TV for \$600 and paid with your credit card that has 22% interest each year. Each month you plan to make a \$40 payment.



- A) How many months will it take to pay off the card?
- B) What is the total amount you will pay for the TV?
- 4. You find a house that costs \$220,000. You plan to have a 30-year mortgage and find a bank that offers 4.8% interest.

- A) What would your monthly payment be?
- B) How much would you pay total for this house after 30 years?
- C) How much interest did you pay total?
- 5. You put \$225 each month into a savings account that makes 5.25% interest for 5 years. Assume you start with \$0 in the account.



- A) How much money is in the account at the end of 5 years?
- B) How much money have you put in the bank over the five years?
- C) How much interest did you make?