

**Criteria to be used in scoring final letters: *For Student Use***

(Standards to be assessed: LA.B.1.4.2 and LA.B.1.4.3)

Using the criteria in the rubric, proofread your final letter, evaluate yourself, and make any necessary corrections before turning in your letter to your teacher. If you prefer, you may choose a partner to assist you with your proofreading. Once your letter has been turned in, if any additional errors are found, it will be returned for corrections before mailing.



Criteria					Score
	4 Excellent	3 Good	2 Fair	1 Poor	
<b>Focus/Purpose</b>	Information is in logical, interesting sequence which reader can follow.	Information is in logical sequence which reader can follow.	Information is out of sequence and difficult to follow.	Information is totally out of sequence. Reader cannot follow.	—
<b>Insight</b>	Student demonstrates full knowledge (more than required).	Student is at ease with content, but fails to elaborate.	Student is uncomfortable with content, but is able to demonstrate basic concepts.	Student does not have grasp of information.	—
<b>Editing*</b>	Writing contains no editing errors.	Writing contains no more than three editing errors.	Writing contains 4 to 9 editing errors.	Writing contains 10 or more editing errors.	—

**\*Editing should include the following:**

- Correct spelling
- Correct punctuation – including commas, colons, and common uses of semicolons
- Correct capitalization
- Correct sentence formation
- Correct instances of possession

**Comments about editing errors:**



## Student Computer Skills Checklist

Nets for Students: 1.1, 1.2 and 1.5

Place a check (✓) in each block as each student demonstrates the required skill. Place a cross mark (X) in the appropriate block as each student asks for assistance or demonstrates difficulty in completing the required task. Use the comments column to record information for essential feedback.

Students' Names	Basic Computer Skills	File Management	Word Processing	Internet	Comments
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# “Where’s the Math”

Sunshine State Standard: MA .A .1 .4 .3 and Nets for Students: 5.1

*Students use efficient search engines or URLs to demonstrate understanding of concrete and symbolic representations of rational numbers in real-world situations. Since this requires searches of the Internet, answers will vary.*

## I. Rising and Falling Fractions – Use the given URL address.

Go to: [http://cnfn.cnn.com/markets/us\\_markets.html](http://cnfn.cnn.com/markets/us_markets.html)

1. On the Web, Internet sites dealing with the stock market provide *stock indexes* listing quotes as decimals instead of fractions. Stock that is up  $\frac{1}{4}$  is equivalent to +0.25, whereas stock that is down  $\frac{1}{4}$  is equivalent to –0.25. This is referred to as a change. You may not find this exact figure everyday because of fluctuations in the stock market. Look for an example of a stock that is up approximately  $\frac{1}{4}$  and one that is down approximately  $\frac{1}{4}$ . (Remember to use decimal equivalents.) Complete the table below.

Company	Last Quote	Change	Rising or Falling

What occupation deals with the information encountered? \_\_\_\_\_

## II. Does the Decimal Point Really Make a Difference? Find the URL address.

2. Search “Decimals: Fast Facts” (Remember to search for items in quotes.)  
**URL** \_\_\_\_\_  
 Is  $0.5 = 5.0$  true or false? \_\_\_\_\_  
 What difference does it make if the decimal point is in front of a nonzero integer or after a nonzero integer?

3. Use the *Mortgage Calculator Axis*.  
**URL** \_\_\_\_\_  
 Compare amounts borrowed at 5% for 5 years of \$2550.50 and an incorrect entry of \$255050 leaving out the decimal point. So, does the decimal point really make a difference? Explain.

What occupation deals with the information encountered? \_\_\_\_\_

**III. What Does Percent Have to Do With It?** Find the URL address.

The average person encounters percent on a regular basis. For example, the probability of rain on any given day is expressed as a percent. Use your knowledge of search engines and the keywords “**percent and probability**” to answer the questions below. Remember to search using the quotes!

**URL** \_\_\_\_\_

4. What is a percent? \_\_\_\_\_
5. Interest is a fee to borrow money. A bank charges 7% interest on a \$1000 loan. How much will it cost the borrower for each year the money is borrowed?  
\_\_\_\_\_

**What occupation deals with the information encountered?** \_\_\_\_\_

**IV. The Large and Small of It!** – Find the URL address.

*Scientific notation* is a symbolic representation used to express very large or very small numbers. Use each of the search engines below to search for information on “**scientific notation.**” Circle the search engine that produces the quickest results then answer Questions 6 and 7.

- a) yahoo.com      b) google.com      c) altavista.com      d) aol.com

**URL** \_\_\_\_\_

6. Are you familiar with this number, 300,000,000 m/sec? What does it represent? Find it on the Web and describe it here. It is \_\_\_\_\_  
Rewrite this large number using scientific notation. \_\_\_\_\_
7. Do you recognize this number, 0.000000000753 kg? It is \_\_\_\_\_  
Rewrite this small number using scientific notation. \_\_\_\_\_

**What occupation(s) deals with the information encountered?** \_\_\_\_\_

**V. The Math Connection** – Use the given URL address.

**Go to:** <http://www.maa.org/careers/index.html>

8. Answer the question, “Why should I study math?” by skimming any one of the essays. Briefly describe why this person needs math. Try to find one in your field of interest.



# “Where’s the Math”

Sunshine State Standard: MA .A .1 .4 .3 and Nets for Students: 5.1

## Answer Key

*Students use efficient search engines or URLs to demonstrate understanding of concrete and symbolic representations of rational numbers in real-world situations. Since this requires searches of the Internet, answers may vary.*

### I . Rising and Falling Fractions – Use the given URL address.

Go to: [http://cnnfn.cnn.com/markets/us\\_markets.html](http://cnnfn.cnn.com/markets/us_markets.html)

1. On the Web, Internet sites dealing with the stock market provide *stock indexes* listing quotes as decimals instead of fractions. A stock that is up  $\frac{1}{4}$  is equivalent to +0.25, whereas stock that is down  $\frac{1}{4}$  is equivalent to –0.25. This is referred to as a change. You may not find this exact figure everyday because of fluctuations in the stock market. Look for an example of a stock that is up approximately  $\frac{1}{4}$  and one that is down approximately  $\frac{1}{4}$ . (Remember to use decimal equivalents.) Complete the table below.

Company	Last Quote	Change	Rising or Falling
General Electric	\$39.35	+0.21	Rising
Gateway	\$8.46	-0.29	Falling

Answers will vary.

What occupation deals with the information encountered? [Stock Broker](#)

### II. Does the Decimal Point Really Make a Difference? – Find the URL address.

2. Search “Decimals: Fast Facts.”

URL <http://www.mccc.edu/~kelld/decff.htm>

Is  $0.5 = 5.0$  true or false? [False](#)

What difference does it make if the decimal point is in front of a nonzero integer or after a nonzero integer?

One decimal place to the right of the decimal point is the "tenths" place, but one decimal place to the left of the decimal point is the "ones" place.

3. Use the *Mortgage Calculator Axis*.

URL <http://www.mortgage-calculator-axis.com/>

Compare amounts borrowed at 5% for 5 years of \$2550.50 and an incorrect entry of \$255050 leaving out the decimal point. So, does the decimal pint really make a difference?

\$2550.50 @ 5% for 5 years = \$48.13 monthly payment

\$255050 @ 5% for 5 years = \$4813.11 monthly payment

Yes, I would say the decimal point makes quite a difference!

What occupation deals with the information encountered?

[Banker or Real Estate Agent](#)

### III. What Does Percent Have to Do With It? – Find the URL address.

The average person encounters percent on a regular basis. For example, the probability of rain on any given day is expressed as a percent. Use your knowledge of search engines and the keywords “**percent and probability**” to answer the questions below. Remember to search using the quotes!

URL <http://www.mathleague.com/help/percent/percent.htm#whatisapercent>

4. What is a percent? A percent is a ratio of a number to 100. A percent can be expressed using the percent symbol %.
5. Interest is a fee to borrow money. A bank charges 7% interest on a \$1000 loan. How much will it cost the borrower for each year the money is borrowed?  
It will cost the borrower 7% of \$1000, which is \$70, for each year the money is borrowed.

What occupation deals with the information encountered? Banker, Real Estate Agent

### IV. The Large and Small of It! – Find the URL address.

*Scientific notation* is a symbolic representation used to express very large or very small numbers. Use each of the search engines below to search for information on “**scientific notation.**” Circle the search engine that produces the quickest results then answer Questions 6 and 7.

- a) yahoo.com      b) google.com      c) altavista.com      d) aol.com

URL <http://www.nyu.edu/pages/mathmol/textbook/scinot.html>

6. Are you familiar with this number, 300,000,000 m/sec? What does it represent? Find it on the Web and describe it here. It is the speed of light.  
Rewrite this large number using scientific notation.  $3.0 \times 10^8$
7. Do you recognize this number, 0.000000000753 kg? It is the mass of a dust particle.  
Rewrite this small number using scientific notation.  $7.53 \times 10^{10}$

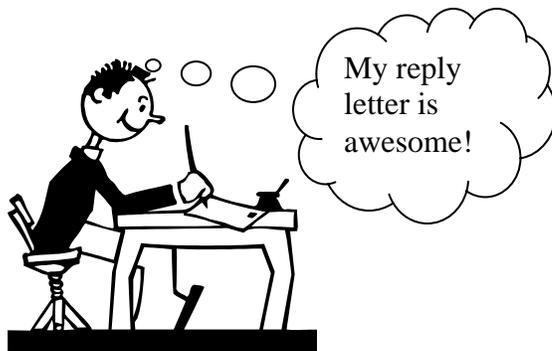
What occupation(s) deals with the information encountered Astronomy, aerospace, astronaut, and science researcher

### V. The Math Connection – Use the given URL address.

Go to: <http://www.maa.org/careers/index.html>

8. Answer the question, “Why should I study math?”. Skim any one of the essays and briefly describe why this person needs math.  
Answers will vary.

# Comments Sheet



## “When Am I Ever Going To *USE* This MATH?”

After receiving your reply letter, respond to the following. Use a separate sheet of paper if necessary.

- 1. From this project, I learned ...**  
(Do not respond to this question in one sentence. Write at least one paragraph.)
  
- 2. Because of the amount of math required for this occupation I will ...**  
(Expound on your positive *and* negative feelings about mathematics and what effect they have on your choice of occupation.)
  
- 3. Give your overall opinion on this project. Were you surprised at the results or were they what you expected? Be sincere and honest in your viewpoints.**  
(Do not answer this in one sentence. Write at least one paragraph.)