



Math Extended Response

1. Read the question carefully. Make sure you know what it is asking you to do.
2. Draw a picture or diagram to help solve the problem. Label all the parts.
3. Solve the problem. **CIRCLE AND LABEL YOUR ANSWER!**
4. Write in words **HOW** you solved the problem (What steps did you do?) and **WHY** did you do it that way (What was your reasoning?) Every **HOW** sentence should have a **WHY** sentence.
5. Use phrases like, "First I...", "I did this to...", "Then I...", "I did this because..."

Math Extended Response

1. What is important?
 - numbers
 - units
 - question(s)

2. What is the question asking?
 - Add, subtract, multiply, or divide
 - Key words
 - Check for more than ONE question

3. Choose a strategy.
 - Show ALL your work
 - Use labels in your work

4. Check your answer with the question(s).
 - Is it logical? Does it make sense?
 - Include the units.

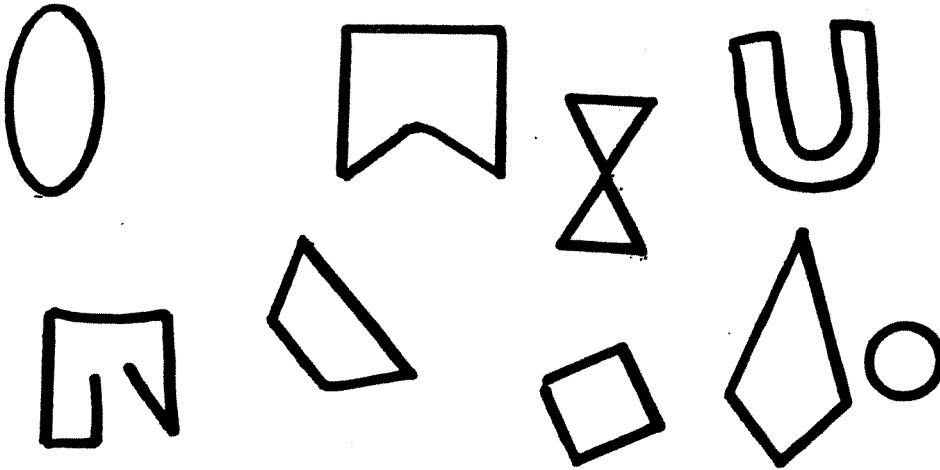
5. Write and explain your work.
 - What did you do?
 - Why did you do it?
 - Remember to restate your answer (with unit) at the end.

Name: _____ Date: _____

Unit 1: Extended Response Question

Making Sense of Shapes

Study the shapes below.
Classify the shapes into groups.



Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.

STRATEGY
Diagram/Picture/Chart

MATH WORK

Name _____

Date _____

Unit
2

Flipping Pages

Al left a secret message for Guy on one of the pages of their math book. Guy knows that the number of the page the message is written on is less than 160, that the page number is a 3-digit number, that one of the digits is 4, and that the total of all three digits in the number is 12. On what page is the message? How do you know?

Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.

STRATEGY

Diagram / Picture / Chart

MATH WORK

4/5/17

Name _____

Date _____

Unit
3

Heavy Readers
Bob reads 1 book every week. Chuck reads 3 books every week. So far, Bob has read 5 books and Chuck has read 3 books. If they keep reading books at the same rate, how many weeks before Chuck has read exactly twice as many books as Bob? Explain how you got your answer.

Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.

STRATEGY
Diagram / Picture / Chart

MATH WORK



Name _____

Date _____

CD Sale

At the CE Record Shop, one CD costs \$4.50. If a second CD is bought, it costs \$4.00. For each additional CD, the price is reduced \$.50. If you buy 6 CD's, what will be the total cost? Show all your work.

Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.

STRATEGY
Diagram / Picture / Chart

MATH WORK

Unit 5

Name _____

Date _____

D2(7)

Digit Digits
How many four-digit numbers can be made by using the numerals 2, 4, 6, and 8 once each in each number?

Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.

STRATEGY
Diagram / Picture / Chart

MATH WORK



6

Name _____

Date _____

Coffee Time

- A. Derrick owns a coffee stand and sells 3 cups of coffee every half an hour. If he opened his stand at 8:00 a.m., how many cups did he sell by 10:30 a.m.?**
- B. One gallon is 16 cups. Is 2 gallons of coffee enough for Derrick for his first 4 hours? Show how you got your answer.**

**Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.**

STRATEGY
Diagram / Picture / Chart

MATH WORK



Name _____

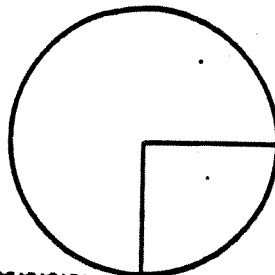
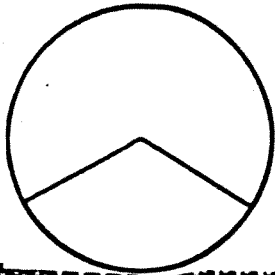
Date _____

Unit 7

Pie Sizing

Sam said that $\frac{1}{3}$ of a pie is less than $\frac{1}{4}$ of the same pie.
Is Sam correct? _____

Use the circles below to show why this is so.



Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.

STRATEGY
Diagram / Picture / Chart

MATH WORK



48
Name _____

5/21 /
Date _____

Rectangles

A. The length of a rectangle is 5 cm and its perimeter is 16 cm. What is the area of the rectangle in square centimeters? Explain how you got your answer.

B. The area of a rectangle is 48 square centimeters. If the width is $\frac{1}{3}$ of the length, find the dimensions of the rectangle.

**Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.**

STRATEGY

Diagram / Picture / Chart

MATH WORK

Unit 9

Name _____

Date _____

H1(7)

School Choir
The school choir has 7 girls for every 4 boys.
If there are 44 people in the choir, how many
are girls? Explain how you got your answer.

Explain what you did and why.
Use words and numbers to explain.
Show all your thinking and work.

STRATEGY
Diagram / Picture / Chart

MATH WORK



Name: _____ Date: _____

Unit 10 - Extended Response Question

Weird Weather

One of the most bizarre temperature changes in history occurred in Spearfish, South Dakota, on January 22, 1943. At 7:30 A.M. the temperature was -4° F. By 7:32 A.M. the temperature had risen to 49° F. By 9:00 A.M. it had risen to 54° F. Then it plunged 58° F in 27 minutes. What was the temperature at 9:27 A.M.?

Explain what you did and why.
Use words and numbers to explain.
Show your thinking and work.

Strategy

Diagram/Picture/Chart

Math Work

Problem 11

Anna and her little brother, Mark, are going to the ice cream store to buy ice cream treats. They have \$4.00 to spend on two different ice cream treats. Each treat must have ice cream and at least one topping. Use the price lists to choose a treat for Anna and a treat for Mark.

- List what is on Anna's treat and Mark's treat.
- Give the total cost for both of the treats.
- Tell how much money is left over after buying the two treats.

Show all your work. **Explain in words** how you got your answer and why you did the steps you did to solve the problem.

Ice Cream	Cost
Small scoop of ice cream	\$0.75
Large scoop of ice cream	\$1.25

Toppings	Cost
Chocolate Sauce	\$0.50
Hot Fudge Sauce	\$0.50
Butterscotch Sauce	\$0.25
Strawberries	\$1.00
Crushed Peanuts	\$0.20
Whipped Cream	\$0.15
Banana Slices	\$0.65
Cherry	\$0.05

Anna's Treat

Mark's Treat

