**ANSWER KEY: All work must be shown as done in class and in notes.**

Below you will find one or more problems per standard that will be on the math CSA. I created this for parents and students.

**Parents**: This will help you understand what standards have been covered and what your child will be asked to do one the CSA.

**Students**: This will allow you to review all the skills you have learned AND take note of any you still feel unsure about. If you find a skill you want extra help on, please tell me (Ms. McCarthy).

**Number and Number Sense (7 questions on CSA)**

*Identify and communicate, both orally and in written form, the place value for each digit in whole numbers expressed through the one millions place. (4.1aSa)*

1. Look at this number: 1,238,760. What digit is in the ten thousands place? **3** What is the value of the 7? **700**

*Read whole numbers through the one millions place that are presented in standard format, and select the matching number in written format. (4.1aSb)*

1. Which number is written to show 1,403,065:
	1. One million forty three thousand six hundred fifty
	2. One million four hundred thirty thousand sixty five
	3. **One million four hundred three thousand sixty five**
	4. One million four hundred three thousand six hundred five

*Write whole numbers through the one millions place in standard format when the numbers are presented orally or in written format. (4.1aSc)*

1. Which number is the standard form of: three million four hundred three thousand, sixty two?
	1. 3,043,602
	2. **3,403,062**
	3. 3,403,602
	4. 3,430,620

*Compare two whole numbers expressed through the one millions, using symbols >, <, or =. (4.1bSe)*

1. 3,209,321 **>** 3,209,231
2. 2,589,213 **>** 2,589,123
3. 4,009,657 **=** 4,009,657

*Round whole numbers expressed through the one millions place to the nearest thousand, ten thousand, and hundred thousand place. (4.1cSf)*

1. Which numbers below would round to 4, 500,000
* **4,487,963**
* **4,538,134**
* 4,561,093
* 4,399,091

**Computation and Estimation (6 questions on CSA)**

*Estimate whole number sums, differences, products, and ~~quotients~~. (4.4aSa)*

1. 348 +219 = **567**
2. 876,090 – 3,459 = **872,631**
3. Know your multiples!
4. Students can practice simple division (9/3, 16/8, etc…)

*Refine estimates by adjusting the final amount, using terms such as closer to, between, and a little more than. (4.4aSb)*

1. The difference of 2,893 – 994 is best described as a little less than
	1. 1,000
	2. **2,000**
	3. 3,000
	4. 4,000
2. The difference of 43,023 - 39,879 is best described as closest to:
	1. 2,500
	2. **3,000**
	3. 3,500
	4. 4,000

*Solve single-step and multistep problems using whole number operations. (4.4dSf)*

1. Ms. McCarthy bought the following items this school year.
* 982 stickers
* 549 pencils
* 439 notebooks

About how many items did she buy? **1900 items**

1. A farmer harvested 5,486 pounds of grapes from his vines in 2014. In 2015 he harvested 4,937 pounds of grapes. If he harvested a total of 15,213 pounds of grapes including the harvest this year, how many did he harvest in 2016? **4,790 pounds of grapes**

**Measurement (2 questions on CSA)**

*Solve practical problems in relation to time that has elapsed. (4.9Sb)*

1. If John left for baseball practice at 1:35pm and was gone for 3 hours and 42 minutes, what time did he get back? **5:17pm**
2. Jodie spent the night at her friend’s house. She arrived at 6:52pm and got home the next day at 7:35am. How long was she gone? **12 hours and 43 minutes**

**Probability, Statistics, Patterns, Functions and Algebra (10 questions on CSA)**

*Construct and display data in bar graphs, labeling one axis with equal whole number increments of 1 or more (numerical data) (e.g., 2, 5, 10, or 100) and the other axis with categories related to the title of the graph (categorical data) (e.g., swimming, fishing, boating, and water skiing as the categories of “Favorite Summer Sports”). (4.14Sc)*

1. Use the following information to create a graph: Billy went fishing this past Saturday. While fishing he saw 25 bass, 32 minnows, 16 bluegill, and 10 flier.
2. How many fish did he see total? **83 fish** How many more bass and minnows did he see than bluegill and flier?\* **31**

*Construct and display data in line graphs, labeling the vertical axis with equal whole number increments of 1 or more and the horizontal axis with continuous data commonly related to time (e.g., hours, days, months, years, and age). Line graphs will have no more than 10 identified points along a continuum for continuous data. For example, growth charts showing age versus height place age on the horizontal axis (e.g., 1 month, 2 months, 3 months, and 4 months). (4.14Sd)*

1. Use the following information to create a graph: Sally finally got the dog she has been hoping for years. She promised her parents she would take extra good care of it and to show her commitment she create a graph of her new dogs weight as she grew. The dog weighed 16 pounds when Sally first got her. Within the month the dog gained 8 pounds. At the weigh in of the third month, Sally’s dog weighed 31 pounds. At the fourth month marker, the dog was 37 pounds.
2. If this trend continues, how much will Sally’s dog weigh at the 6th month weigh in?\* **46 pounds**

*Interpret data from simple line and bar graphs by describing the characteristics of the data and the data as a whole (e.g., the category with the greatest/least, categories with the same number of responses, similarities and differences, the total number). Data points will be limited to 30 and categories to 8. (4.14Sf)*

***\* Shown under each***

*Write at least one sentence to describe the analysis and interpretation of the data, identifying parts of the data that have special characteristics, including categories with the greatest, the least, or the same (4.14Sh).*

***\* Shown under each***

*Create geometric and numerical patterns, using concrete materials, number lines, tables, and words. Extend geometric and numerical patterns, using concrete materials, number lines, tables, and words. (4.15Sb and c)*

1. The first six numbers in the patterns below were made using a rule.

75, 68, 61, 54, 47, 40,… **33, 26, 19**

If the pattern continues the same way, what will be the next three numbers in the pattern?



1. Sharon is studying her genealogy and has started a family tree of ancestors from which she is directly descended.

Sharon has been able to identify direct ancestors for six previous generations. How many direct ancestors does she have in the 6th generations before hers? **64**

1. The first two numbers in the “IN/OUT” machine were created using an addition rule. Find the rule and fill in the blanks

|  |  |
| --- | --- |
| In | Out |
| 15 | 28 |
| 18 | 31 |
| 24 | **37** |
| **43** | 56 |

*Recognize and demonstrate appropriate use of the equals sign in an equation. (4.16aSc)*

1. Circle all the equations that are FALSE
* **431 + 261 = 541 + 511**
* **984 – 549 > 239 + 356**
* **525 + 329 < 891 – 148**
* 542 + 319 < 621 + 298

*Investigate and describe the associative property for addition. (4.16bSd)*

1. Finish the equation to show the associative property of addition:

2 + (4 + 9) = **(2+4)+9**