Activity #1

Domain: Operations and Algebraic Thinking
5OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

Directions:
Part I:
Evaluate the following expressions.

1. (2x6)+(6x4)

2. 6x(14÷7)–3

3. 328÷(8x3)+6x2

4. 486–(12x3)

5. 89(16÷4)+83

6. 4.8x36÷12

Part II:
Tell how the order of operations affects the outcomes of each of the above problems. Write out the answer you would get if you did not follow the order of operations and common mistakes that are made when the order of operations is not applied.

Part III:
Evaluate the expression:

2{ 5[12 + 5(500 - 100) + 399]}

Activity #2

Domain: Operations and Algebraic Thinking
5OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.

Directions:
1. Make a chart (table) to represent the number of fish that Sam and Terri catch.

Sam: 0,2,4,6,8,10
Terri: 0, 4, 8, 12, 16, 20

2. Describe the pattern.

3. How many fish do they have after each of the five days?

4. Make a graph of the number of fish.

5. Plot the points on a coordinate plane and make a line graph, and then interpret the graph.

Activity #3

Domain: Operations and Algebraic Thinking
5OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane.

Directions:
1. Play "Guess My Rule."
2. Make up a rule that generates one number from another.
Example: "Add 5" generates 8 from 3.
3. Make a table of both numbers from this rule in an input/output tale.
4. Plot the points on a graph and describe the graph.

Rule: _____
Table:

5. Try out this problem using the same methods as above.
Choose one of three different situations by looking at the pattern in each option:

Mr. Trumpet would like to offer you a job. He will hire you for ten days. He will pay you one of three ways:

a) $2 the first day, $4 the second day, $6 the third day and so on.
b) $0.50 the first day, $1.00 the second day, and each day after will be double the day before.
c) $6 a day for each of the ten days.

Which way would you choose? Explain why. Show the work you completed to reach your decision.

Activity #4

Domain: Number and Operations in Base Ten
5NBT.4 Use place value understanding to round decimals to any place.

Directions:
1. Round each of the following to the tens place.

884   973   8,222   10.02

2. Round each of the following to the hundreds place.

884   973   8,222   10.02

3. Round each of the following to the tenths place.

0.667   30.09   432.002   78.8
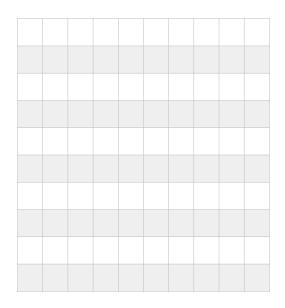
4. Round each of the following to the hundredths place.

 0.667   30.09   432.002   78.8
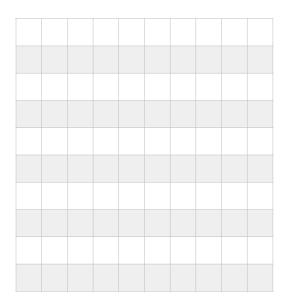
5. Round each of the following to the thousandths place.

0.667   30.09   432.002   78.8

6. Chose 2 numbers from above to model using a hundreds chart. Model the number by shading in the squares. *Hundreds charts are provided on the next pages*

Number:_____

Number:_____

Activity #5

Domain: Number and Operations—Fractions
5NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.

Directions:
1. Read the following scenario and make a plan for how to solve.
Considering that one box of cake mix usually makes 24 cupcakes, how many boxes of cake mix would you need to purchase to feed your entire math class if each student and teacher were going to have 2 1⁄2 cupcakes?

2. Create 10 addition problems with fractions with unlike denominators (including mixed numbers). Example: 81⁄2+21⁄4
*Make sure to create an answer key with answers and explanations.

3. Create 10 subtraction problems with fractions with unlike denominators.
Example: 4 (2/3) – 1 (2/5)
*Make sure to create an answer key with answers and explanations.

4. Finally, create your own story problem using one of your problems from #2 or #3 above. Use #1 to help you if needed. *Be sure to work out the problem and explain your thinking.