Problem of the Day January

Day 1

What is the order of operations? What is an easy way to remember the order of operations? _____

_____

Day 2

What is the expanded form of 154.06? _____

_____

_____

Day 3

How do you find the volume of a rectangular prism? What is the formula?

_____

_____

Day 4

What is $\frac{1}{6}$ divided by 2? How do you know?

_____

_____

Day 5

What number is halfway between 1.5 and 1.6? How do you know?

_____

_____

Problem of the Day January

Day 1

What is $\frac{1}{4}$ + 0.6? How did you find your answer?

_____

_____

Day 2

What decimal is equivalent to $\frac{2}{8}$? _____

Day 3

What is the volume of a rectangular prism that is 0.5 meters wide, 2 meters tall, and 2.5 meters in length? _____

_____

Day 4

Find and continue the pattern:

Answer with a base of 3	**3**	**9**	**27**	_____	_____	_____
Exponent	1	2	3	4	5	6

Day 5

3 + (19-7) x 4? What is a common mistake that someone could make when solving this problem?

_____

_____

Problem of the Day January

Day 1

Fill in the missing exponent and operation symbols to finish the equation.

6^___ + (8 ___ 3) = 41

_____

_____

Day 2

A number times 1.2 equals 1.8. What is the number? How did you solve this?

_____

_____

Day 3

Michael uses a 25-pound bag of chicken feed every two weeks to feed his flock. How much do his chickens eat each day? Write your answer in fraction form.

_____

_____

Day 4

Compare these two numbers using <, >, or =. 3 pints _____ 1.5 quarts.

Day 5

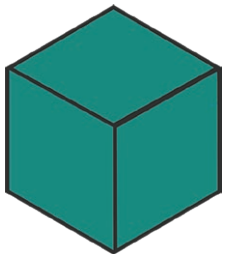
Continue this pattern: 4, 16, 64,

_____, _____, _____, _____, _____

Problem of the Day January

Day 1

What is the volume of this cube?



2.5 inches

Day 2

What is $12\ \frac{7}{9}$ renamed as an improper fraction? How did you solve this?

Day 3

Rosa's horse drank $12\ \frac{2}{3}$ gallons on Monday morning. On Tuesday, the horse drank $1\ \frac{1}{2}$ times as much as on Monday. How much did the horse drink on Tuesday morning?

Day 4

Manuel's car gets an average of 32 mpg. He is planning a trip that is 546 miles. How many gallons of gasoline will he use on the trip? (Round to the nearest whole gallon.)

Day 5

The volume of a cube is 27 cubic inches. What is the length of one side? How did you get your answer?

Problem of the Day January **Answer Key**

Week 1

Day 1: **Parentheses, exponents, multiplication and division from left to right, addition and subtraction from left to right; An easy way to remember the order is with a pneumonic such as, "Please excuse my dear Aunt Sally."**

Day 2:**1 x 100 + 5 x 10 + 4 x 1 + 6 x $\frac{1}{100}$**

Day 3: **V = l x w x h**

Day 4: **$\frac{1}{12}$; Convert 2 to a fraction, $\frac{2}{1}$. Then, solve 1 x 1 and 6 x 2 = $\frac{1}{12}$.**

Day 5: **1.55; 1.5 is equivalent to 1.50 and 1.6 is equivalent to 1.60, halfway between 50 and 60 is 55**

Week 2

Day 1: **0.85; change $\frac{1}{4}$ to a decimal 0.25 and add to 0.6**

Day 2: **0.25**

Day 3: **2.5 cubic meters**

Day 4: **: Find and continue the pattern:**

Answer with a base of 3	3	9	27	**81**	**243**	**729**
Exponent	1	2	3	4	5	6

Day 5: **51; Solving the problem from left to right and not following the order of operations.**

Week 3

Day 1: **6^2 + (8 - 3) = 41**

Day 2: **1.5; divide 1.8 by 1.2**

Day 3: **$\frac{25}{14}$; 1 $\frac{11}{14}$**

Day 4: **3 pints___=___1.5 quarts**

Day 5: **4, 16, 64, 256, 1,024, 4,096, 16,384, 65,536**

Week 4

Day 1: **15.625 cubic inches**

Day 2: **$\frac{115}{9}$; Multiply the denominator by the whole number and add the numerator, this is the new numerator. The denominator remains the same.**

Day 3: **19 gallons**

Day 4: **17 gallons**

Day 5: **3 inches; Guess and check what number times itself 3 times equals 27.**