Logic 2: Due November 17, 2017

Name _____ **Period** ____

Problem 1 **Time =** _____

Find A, B, C, and D given the following facts.

A < B < C < D **None of the letters is equal to 0 nor negative.**

A + D + D = 26

A + B + C = 17

A + B + B + C = 22

A + A + B + B = 18

A = ____ B = ____ C = ____ D = ____

Problem 2 **Time =** _____

Cross out 16 of the letters below to form a 3 word sentence that is common.

APLATSYOIUTODFLOSTRAWIAURTDS

Problem 3 **Time = _____**

Make each row and column add up to 60.
Use the following numbers to fill in the missing blanks:
0, 0, 3, 6, 15, 18, 18, 18, 24, 24, 39

12			21
			0
24		18	

Problem 4 **Time = _____**

X, Y, and Z are three different digits in the problem below, with none of them being 0. Find the values of them that make the below statement true.

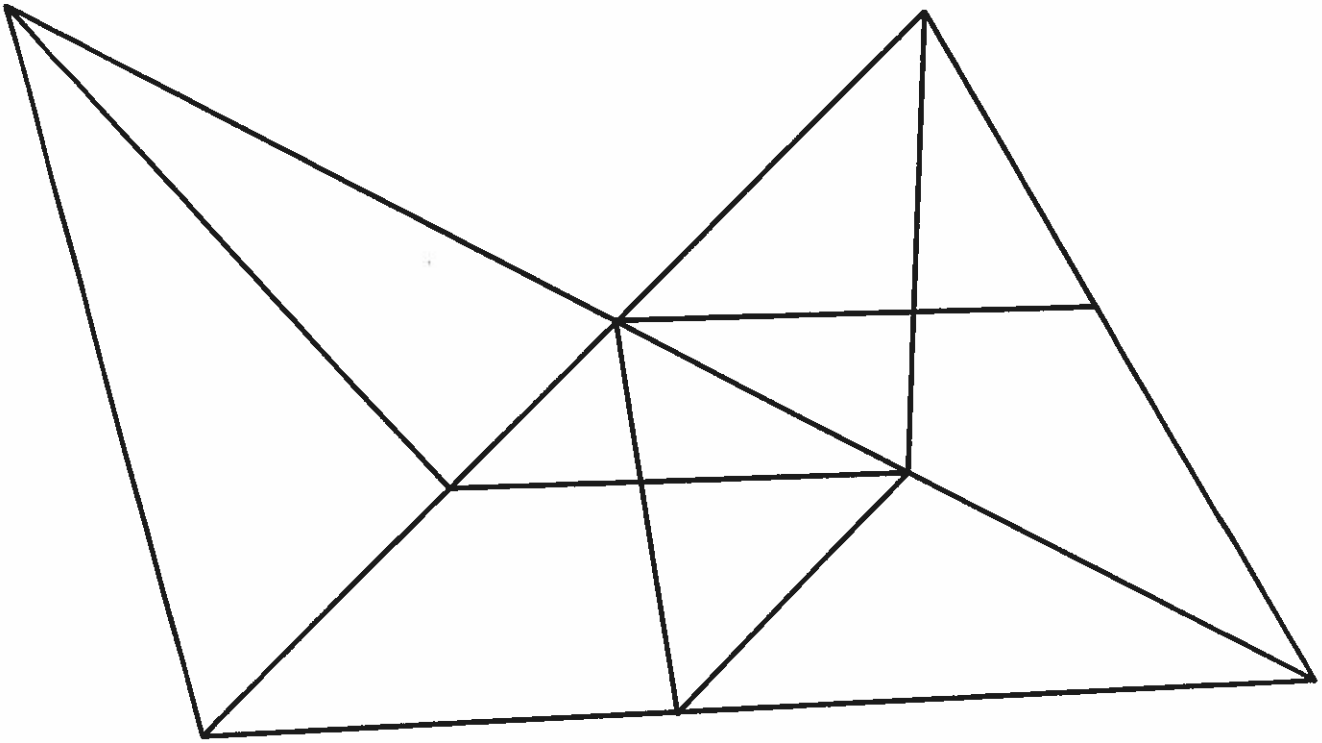
NOT MY OWN

$$\begin{array}{r} XXXX \\ YYYY \\ +\ ZZZZ \\ \hline YXXXZ \end{array}$$

X = _____ Y = _____ Z = _____

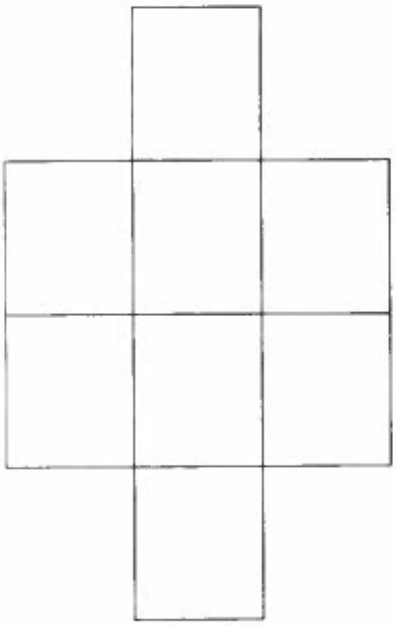
Problem 5 **Time = _____**

How many total triangles do you see? This is not as easy as you might think. Come up with a way to keep track of your triangles.



Problem 6 **Time = _____**

Here is an old problem I remember from when I was your age.
Put the numbers 1-8 in the squares below, but you can't have any two consecutive numbers touching horizontally, vertically, or diagonally.



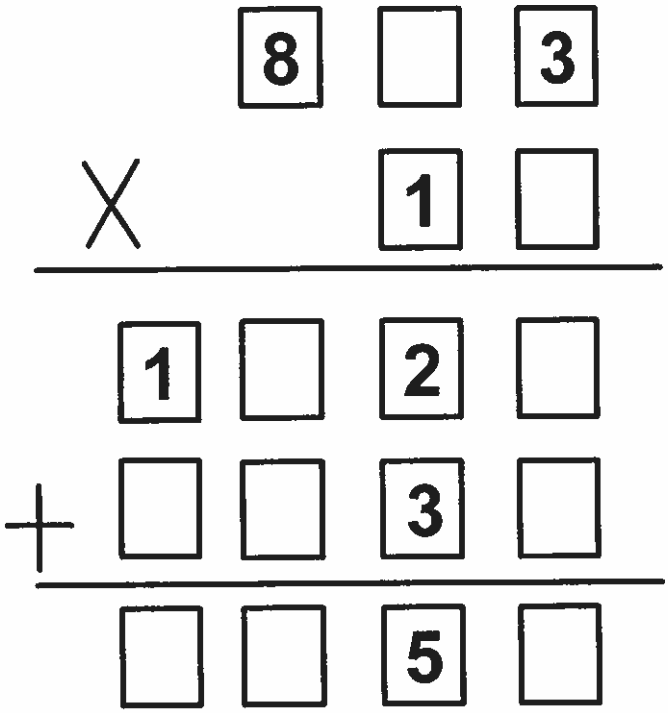
Problem 7 **Time = _____**

Here is another old problem from when I was younger (not that I am old now). Place two minus signs and one plus sign between the numbers below to make it a true equation.

1 2 3 4 5 6 7 8 9 = 100

Problem 8 **Time = _____**

Fill in the missing digits to make the problem below a true multiplication problem.



Problem 9 **Time = _____**

Using the numbers 1-16, make each adjacent pair of numbers (vertically and horizontally) add up to a prime number.
Prime numbers are numbers that can only be divided by 1 and themselves.
Here are the first 11 prime numbers, which is all you should really need: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, and 31.

		1	
	7	**6**	

Problem 10 **Time = _____**

Here is a problem I saw on a Math Riddle Quiz on Facebook. Hence, this is not one of mine.
Consider the following digits: 1, 1, 2, 2, 3, 3, 4, 4
Create a number where there is only 1 digit between the ones, 2 digits between the twos, 3 digits between the threes, and 4 digits between the fours.

For example, 43121324 is almost correct since there is one digit between the ones, two digits between the twos, and three digits between the threes; however, there are six digits between the fours and there needs to be just 4.

Logic 2 Answers

(Due Friday, November 17, 2017)

Name _____ **Period** ____

Problem 1 **Time =** _____

A = ____ B = ____ C = ____ D = ____

Problem 2 **Time =** _____

Sentence: _____

Problem 3 **Time =** _____

12			21
			0
24		18	

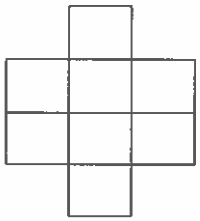
Problem 4 **Time =** _____

X = ____ **Y =** ____ **Z =** _____

Problem 5 **Time =** _____

Triangles = _____

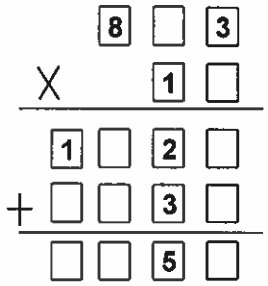
Problem 6 **Time =** _____



Problem 7 **Time =** _____

1 2 3 4 5 6 7 8 9 = 100

Problem 8 **Time =** _____



Problem 9 **Time =** _____

		1	
	7	6	

Problem 10 **Time =** _____

Answer = _____