

Logic 1



"Just a darn minute! — Yesterday
you said that X equals two!"

(http://www.prashanthellina.com/images/math_cartoon_yesterday_x.jpg)

Due: Friday, September 20, 2013

Logic Problem 1

Time = _____

If I have quarters, dimes, nickels, and pennies, how many of each do I have knowing that there are only 20 total coins and the total value of the coins is \$1.85? You must use at least one of each coin.

Quarters = _____

Dimes = _____

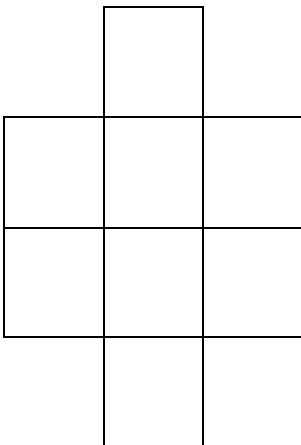
Nickels = _____

Pennies = _____

Logic Problem 2

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.



Logic Problem 3

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.

$$1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 = 100$$

Logic Problem 4

Time = _____

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

	8		3
X		1	
	1		2
+			3
			5

Logic Problem 5

Time = _____

I just moved into a new neighborhood and have been given four brass house numbers: 2, 3, 7, and 9. Since I am the first house in the neighborhood, I get to choose what my address is going to be using these 4 brass numbers. The only catch is that my address can't be four digits long (a single digit address, two digit address, or three digit address is okay). Remember that each number can only be used once since you only have one of each. For example, you can't make the address 223 since you only have one brass house number with the digit 2 on it. Given these conditions, how many different addresses can I form from the 4 brass numbers?

Logic Problem 6

Time = _____

Using the numbers 1-16, make each adjacent pair of numbers (vertically and horizontally) add up to a prime number. I put 1, 6, and 7 in for you. 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	

Logic 1 ANSWERS

Name _____

Problem 1 Time = _____

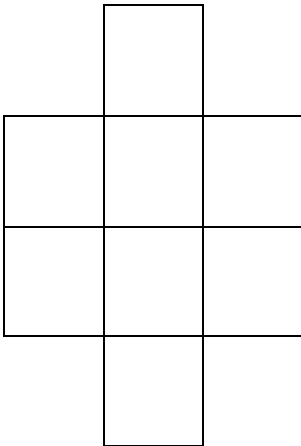
Quarters = _____

Dimes = _____

Nickels = _____

Pennies = _____

Problem 2 Time = _____



Problem 3 Time = _____

1 2 3 4 5 6 7 8 9 = 100

Problem 4 Time = _____

$$\begin{array}{r}
 83 \\
 \times 1 \\
 \hline
 12 \\
 + 3 \\
 \hline
 5
 \end{array}$$

Problem 5 Time = _____

Different addresses = _____

Problem 6 Time = _____

		1	
	7	6	