

# Logic 3

Due Friday, November 22, 2013

Logic 1 - Time = \_\_\_\_\_

Fill in the blanks using each of the numbers 1-12 to make each row and column have a sum of 17. I have filled in the blanks with a few of the numbers to help you. I did have to use the number 2 twice in order to make things work for you.

2				7	
			11		
	4				2

Logic 2 - Time = \_\_\_\_\_

There are 11 teams in a basketball tournament and each team must play the other team once and only once. How many different games must be scheduled? \_\_\_\_\_

**Logic 3 - Time = \_\_\_\_\_**

On my last test, there were 5 more B's than A's and twice as many C's as B's. There were no D's or F's. Out of the 91 tests, how many made a B?

**Logic 4 - Time = \_\_\_\_\_**

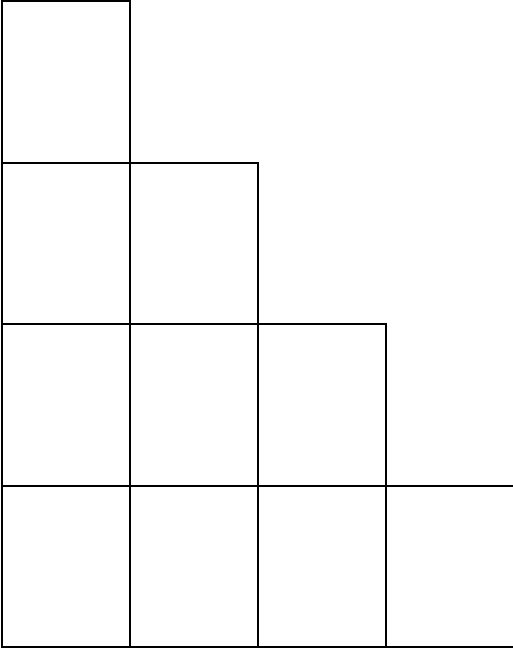
Fill in the blanks with the appropriate digits to make the problem a true multiplication problem.

$$\begin{array}{r} \square\square6\square \\ \times \quad \quad \quad 8 \\ \hline 39,7\square0 \end{array}$$

$$\begin{array}{r} \square\square\square\square6 \\ \times \quad \quad \quad 9 \\ \hline 109,\square5\square \end{array}$$

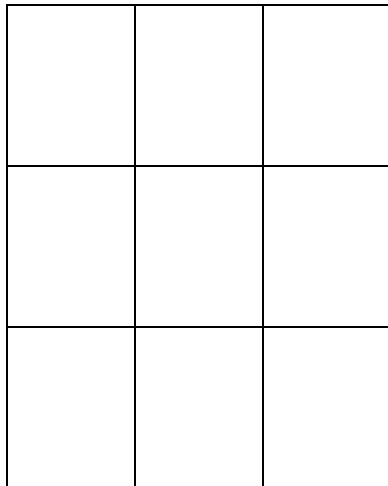
**Logic 5 - Time = \_\_\_\_\_**

Fill in the blanks with each of the numbers 1-10 such that no two consecutive numbers are adjacent to one another vertically, horizontally, or cornerwise.



**Logic 6 - Time = \_\_\_\_\_**

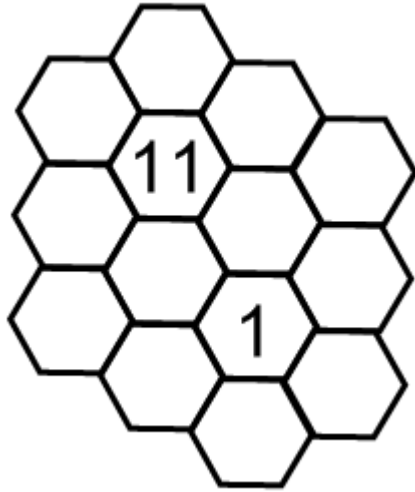
Fill in the blanks with each of digits 1-9 so that each of the columns, rows, and main diagonals add up to a different number.



**Logic 7 - Time = \_\_\_\_\_**

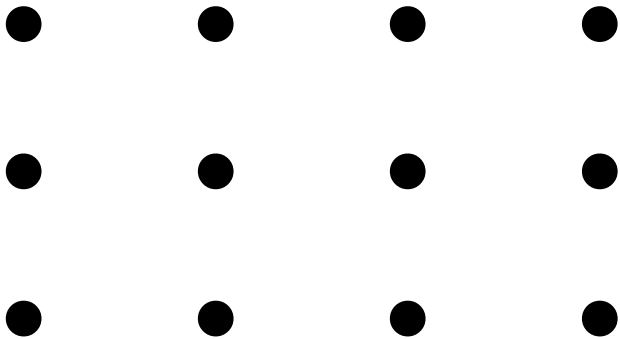
Using the numbers 1-14, place them in the hexagons below so that no consecutive numbers are adjacent and no number has one of its factors next to it except the number 1. I have placed 1 and 11 in the blanks to help you.

For example, 12 has the factors 1, 2, 3, 4, 6, 12, so you could not place 2, 3, 4, or 6 beside the 12.



**Logic 8 - Time = \_\_\_\_\_**

**How many rectangles (a square is a rectangle) can be drawn using four of these twelve evenly spaced points?**



**Answer = \_\_\_\_\_**