

Logic 4: Due May 4, 2018

Name _____

Period _____

Problem 1 Time = _____

Mr. Carrow received a membership card to Chucky Cheeses. The lifetime membership card showed a five-digit number, of which each digit was different. When he turned the card upside down, he found the resulting number was 7920 **more than** the original one. What was his membership number? _____

Problem 2 Time = _____

If the probability of having a girl is $\frac{1}{2}$ and the probability of having a boy is also $\frac{1}{2}$, what is the probability that a family with four children has two boys and two girls?
PUT ANSWER AS A FRACTION

Hint: List out all the possibilities and then see what percent are families with 2 boys and 2 girls.

Example: Boy, Boy, Boy, Girl OR Boy, Girl, Boy, Boy
(These are different and would count as two different outcomes.)

Problem 3 Time = _____

Use each of the digits 1-9 to form a correct addition problem.
You can only use each digit once.

+			

Problem 4 Time = _____

Have each row add up to the number to the right of the row and have each column add up to the number below the column. Within a row or column, you cannot use the same number twice. Numbers can be repeated, but they cannot be within the same row or column.

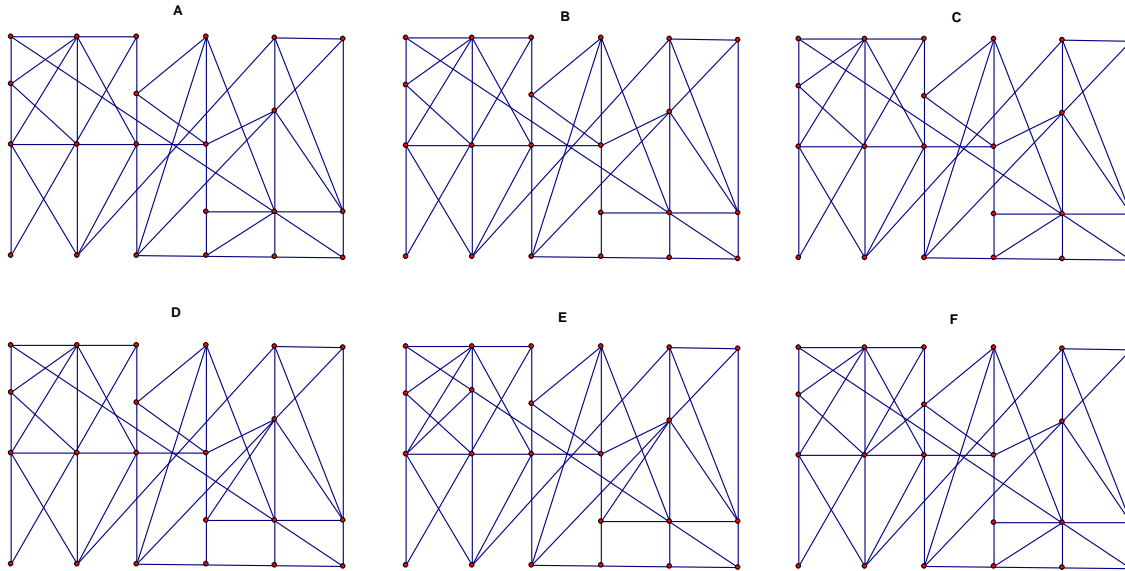
Here are the numbers you must use on this box:

1, 1, 1, 2, 2, 3, 4, 4, 4, 5, 5, 6, 6, 8, 8, 9

				13
				15
				18
				22
18	14	13	24	

Problem 5 Time = _____

Which of the following 2 are exactly the same? _____



Problem 6 Time = _____

Use the digits 1-9 in numerical order to make the statement true.

Example: Use digits 1-4 in order to make 19.

$$\boxed{12} + \boxed{3} + \boxed{4} = 19$$

Notice how the digits are in order from 1 to 4 (1,2,3,4).

$$\boxed{} + \boxed{} - \boxed{} + \boxed{} - \boxed{} = 100$$

Digits must be in order from 1 to 9.

Problem 7 Time = _____

Find the value of the letters in the true multiplication problem.

$$\begin{array}{r} \text{A M} \\ \times \text{I M} \\ \hline \text{I A M} \\ + \text{A M Y} \\ \hline \text{S U M} \end{array}$$

A = _____ M = _____ I = _____

Y = _____ S = _____ U = _____

Problem 8 **Time = _____**

Find the numbers that make the following equation true given the facts about each:

$$a + b + c + d + e = 59$$

a is 5 times the value of b.

b is 10 less than d.

d is 8 times the value of c

e is 1 less than b and 3 more than c.

a = _____

b = _____

c = _____

d = _____

e = _____

Logic 4 Answers

(Due Friday, May 4, 2018)

Name _____

Period _____

Problem 1 Time = _____

Membership Number is _____

Problem 5 Time = _____

The two that are the same are _____.

Problem 2 Time = _____

Probability is _____

Problem 6 Time = _____

$$\square + \square - \square + \square - \square$$

Problem 3 Time = _____

$$\begin{array}{r} \square \quad \square \quad \square \\ + \square \quad \square \quad \square \\ \hline \square \quad \square \quad \square \end{array}$$

Problem 7 Time = _____

A = ___ M = ___ I = ___

Y = ___ S = ___ U = ___

Problem 4 Time = _____

Problem 8 Time = _____

a = _____

b = _____

c = _____

d = _____

e = _____

