Logic 2: Due February 14, 2025

Name _____ Period ____

Problem 1 Time = _____

Below is what is called a Numbrix. Marilyn vos Savant came up with the idea and I have made my own for you to try. If you like this type of problem, go to www.parade.com/numbrix for some other Numbrix puzzles.

Complete 1-81 so the numbers follow a horizontal or vertical path. No diagonal paths are allowed.

71		67		65		49		45
73								43
	81							
75								39
					1			
7								33
11		13		19		25		31

Problem 2 **Time = _____**

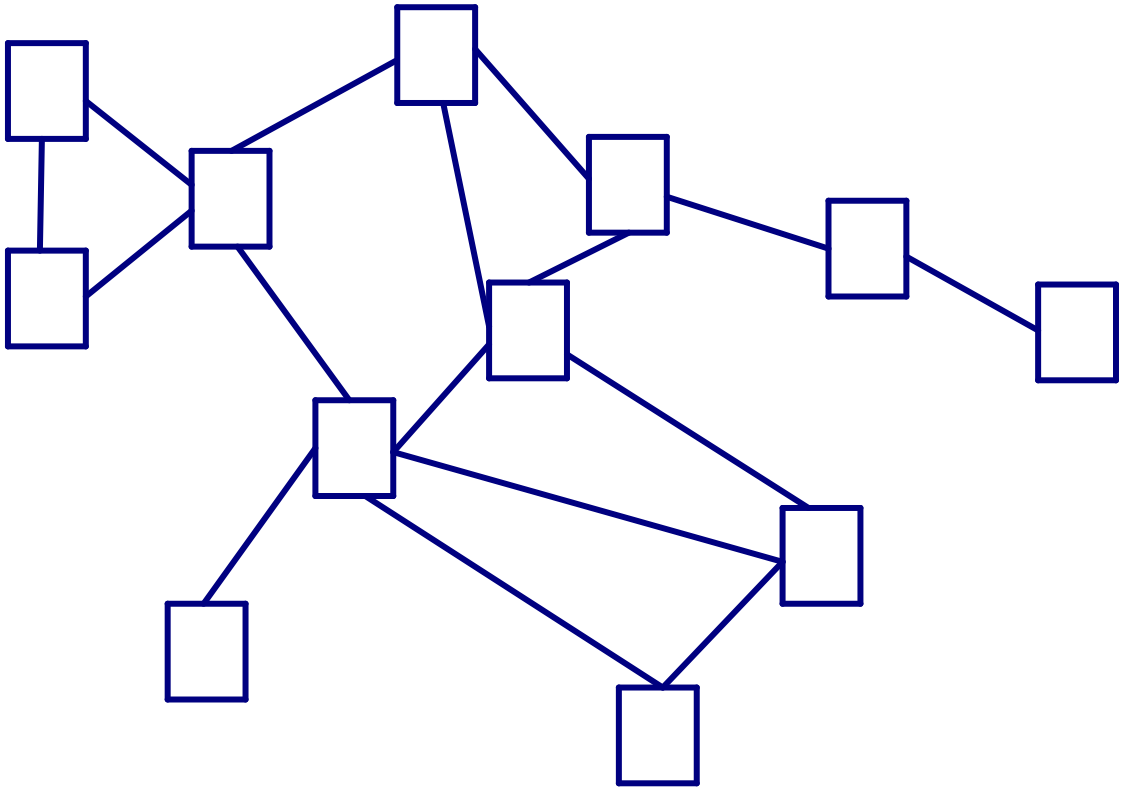
(Here is a problem that I gave about 20 years ago. I don't remember if I made it up or got it from someone, so I will not take credit for it.)

There are twelve friends who have been chatting on the phone:
Aaron, Beth, Chad, Dina, Eddie, Fred, Gillie, Hannah, Ira, Juan, Kevin, and Leon.

Below is a map of their twelve houses. A line connecting two houses shows which two people talked on the phone. Use the map and the clues to figure out in which house each person lives. Fill in the blanks with the person's **first initial** when you have figured out where he or she lives.

Here is the list of who talked to whom last night:

Gillie – Ira	Beth – Juan	Dina – Eddie	Dina – Gillie
Aaron – Juan	Hannah – Eddie	Dina – Ira	Chad – Dina
Beth – Kevin	Eddie – Fred	Hannah – Aaron	Chad – Juan
Aaron – Eddie	Beth – Chad	Juan – Eddie	Leon – Kevin



Problem 3 Time = _____

Find a, b, c, d, e, and f given the following conditions:

a (b + c + d + e + f) = 184
b (a + c + d + e + f) = 225
c (a + b + d + e + f) = 301
d (a + b + c + e + f) = 369
e (a + b + c + d + f) = 400
f (a + b + c + d + e) = 525

a = ___ b = ___ c = ___ d = ___ e = ___ f = ___

Problem 4 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 = _____

Problem 5 **Time = _____**

Find the value of A, B, C, D, and E that make the problem below a true multiplication problem. Each letter is a different digit and none of the letters is a 0.

$$\begin{array}{r} ABCDE \\ \times \quad\quad 4 \\ \hline EDCBA \end{array}$$

A = ____ **B = ____** **C = ____** **D = ____** **E = ____**

Problem 6 **Time = _____**

The letters A, B, and C stand for three different digits. None of the digits is a 0.

$$\begin{array}{r} A\ A \\ +\ B\ B \\ \hline C\ B\ C \end{array}$$

A = _____

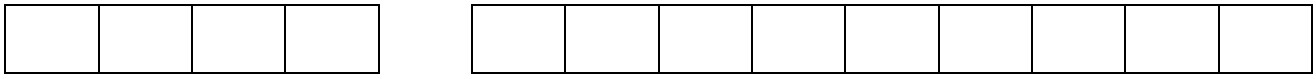
B = _____

C = _____

Problem 7 **Time = _____**

From the letters given, fill in the blanks to make real statements.

Example: **Given letters – BLAUDISGITLLN**



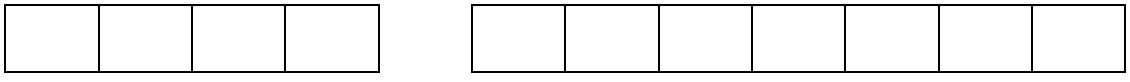
Answer:

T	A	L	L		B	U	I	L	D	I	N	G	S

Question 1 **Letters: PUELEGPYLO**

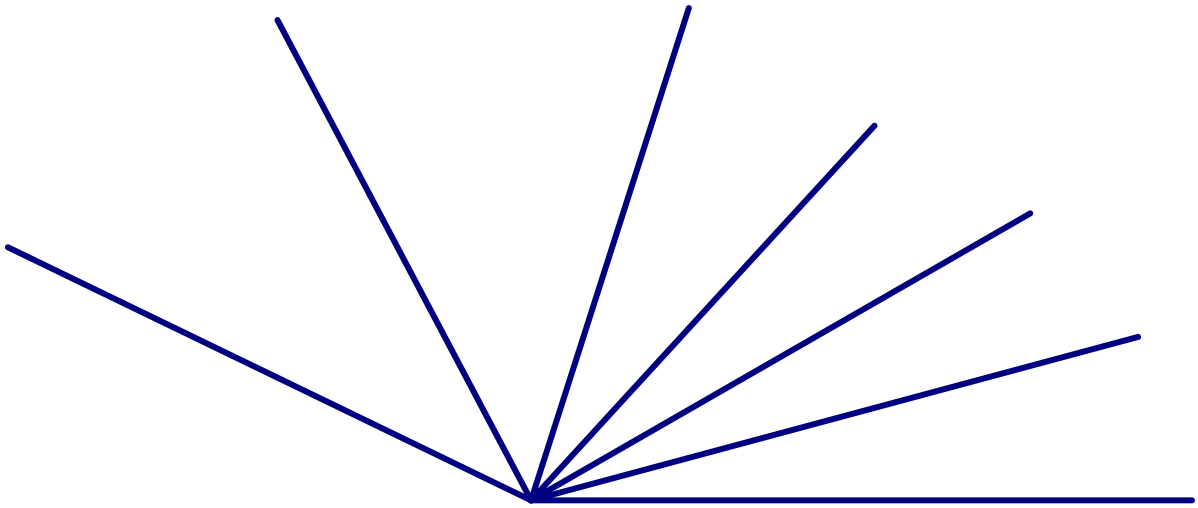
Question 2 **Letters: KSEUYJFNON**

Question 3 **Letters: LEBOEYSPRAM**



Problem 8 **Time = _____**

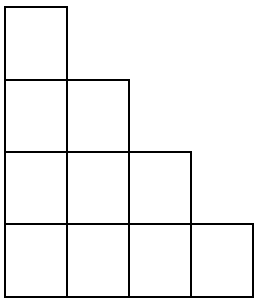
How many different angles less than 180° are there in the figure below?



Number of angles = _____

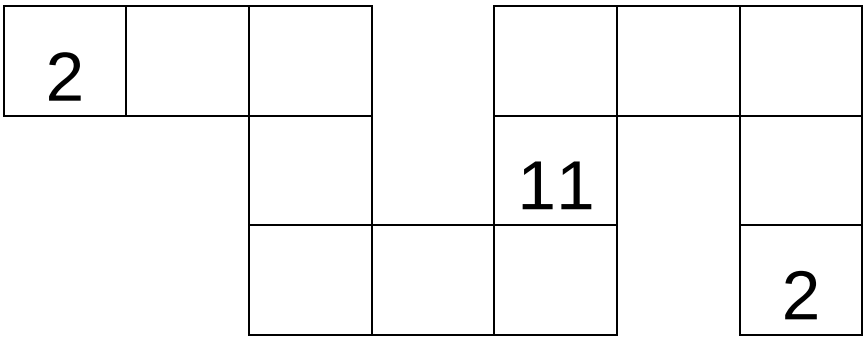
Problem 9 **Time = _____**

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.



Problem 10 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.



Logic 2 Answers

(Due Friday, February 14)

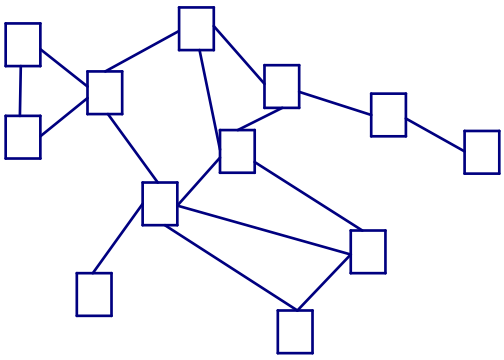
Name _____ Period ____

Problem 1 **Time = _____**

Tell what number is to the right of

81:____ 73:____ 55:____

Problem 2 **Time = _____**



Problem 3 **Time = _____**

a = ____ b = ____ c = ____

d = ____ e = ____ f = ____

Problem 4 **Time = _____**

Quarters = ____ Dimes = ____

Nickels = ____ Pennies = ____

Problem 5 **Time = _____**

A = ____ B = ____ C = ____

D = ____ E = ____

Problem 6 **Time = _____**

A = ____ B = ____ C = ____

Problem 7 **Time = _____**

Question 1 = _____

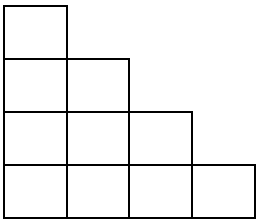
Question 2 = _____

Question 3 = _____

Problem 8 **Time = _____**

Number of angles = _____

Problem 9 **Time = _____**



Problem 10 **Time = _____**