Triangles

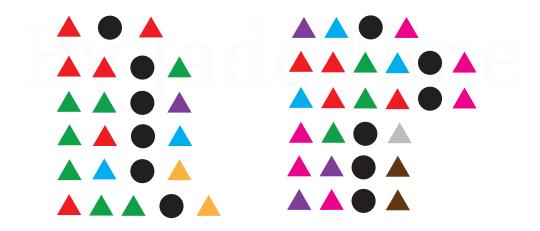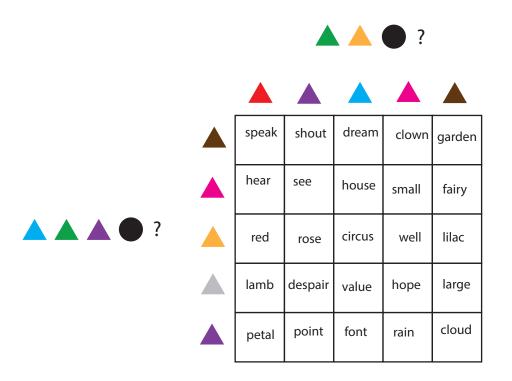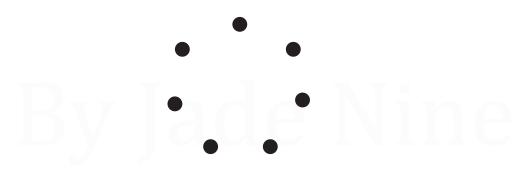|	▲	▲	▲	▲	▲
▲	speak	shout	dream	clown	garden
▲	hear	see	house	small	fairy
▲	red	rose	circus	well	lilac
▲	lamb	despair	value	hope	large
▲	petal	point	font	rain	cloud

Gnomes

Forty Nine Gnomes start out on the above dots, initially seven on each dot.

Each gnome hops clockwise along the dots, once per minute.

The gnomes can hop more than one dot when they hop, though - for example, some gnomes may skip over three dots when they jump.

In fact, each gnome picks a number from 0 to 6, and hops that many dots each minute.

So, a gnome that picks 0 hops nowhere and stays on their first dot,

A gnome that picks 1 will hop one dot clockwise every minute,

A gnome that picks 2 will hop forward to the second dot in the clockwise direction every minute,

A gnome that picks 3 will hop forward to the third dot in the clockwise direction every minute,

etc.

Now, you want to capture the gnomes.

Each minute, you can jump onto one of the dots and capture all the gnomes currently on that dot.

You can pick any dot you want, but you can only pick one per minute.

What's the shortest time, in minutes, that you would need to capture all the gnomes?

Tens Digit / Ones Digit	0	1	2	3	4	5	6	7	8	9
0		fluffy	soft	loud	short	tough	green	tall	clever	sparkly
1	quiet	boring	defiant	exciting	rowdy	allergic				
2		orange	useful	useless	pink	blue				
3										
4										
5										
6										
7										
8										
9										

Hexagon?

In the xyz-coordinate space, define the following sets:
A = {(x,y,z)|x=y} - this is the set of all points whose x-coordinate equals its y-coordinate
B = {(x,y,z)|y=z}
C = {(x,y,z)|z=x}
M = {(x,y,z)|x+y+z=0}
S = {(x,y,z)|x^2+y^2+z^2=2}

Let X=(A∩M∩S)U(B∩M∩S)U(C∩M∩S)

Determine the area of X as a simplified number of the form a*sqrt(b)

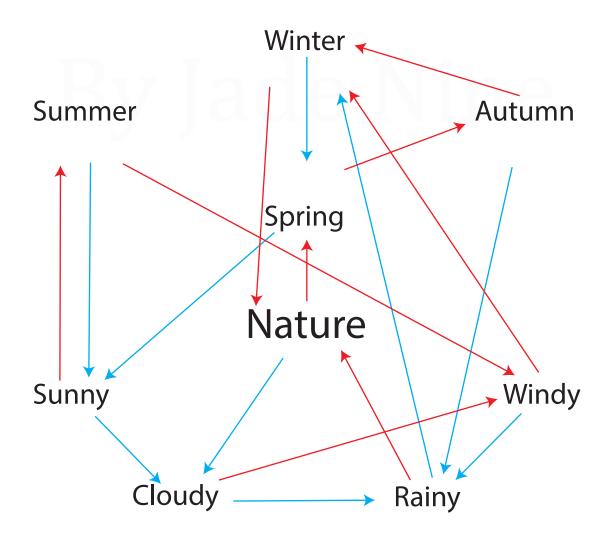| a \ b	0	1	2	3	4	5	6	7	8	9
0										
1		get	give	sleep		find	have	eat		
2		is	eat	give		find	sleep	have		
3		sleep	get	have		eat	give	is		
4										
5										
6										
7										
8										
9										

Pascal

How many odd numbers are there in the first 64 rows of Pascal's Triangle? ("first 64 rows" means rows 0 through 63.)

Determine the answer, and then multiply its digits together to get a new number.
If the result is not a two-digit number, then do this again.
Repeat until you end up with a two-digit number.

Tens Digit / Ones Digit	0	1	2	3	4	5	6	7	8	9
0										
1		I	you	me	we					
2										
3										
4		orangutan								
5										
6					they	us	it	all		
7										
8						every	no			
9										

Seasons

Nature —— —— Autumn

Nature | —— | ——Windy

Nature | —— —— —— ——Spring

Nature —— —— | —— ——Winter

Nature —— | —— —— | —— Windy

Nature —— —— —— | ——Spring

Nature | —— —— | ——Nature

Nature —— | —— | —— —— —— ——Nature

Rainy | —— —— —— | ——?

Fill in the blanks for the final answer

I _____ _____ _____ an _____ _____ !
   (Triangles) (Pascal) (Hexagon?)   (Gnomes) (Seasons)