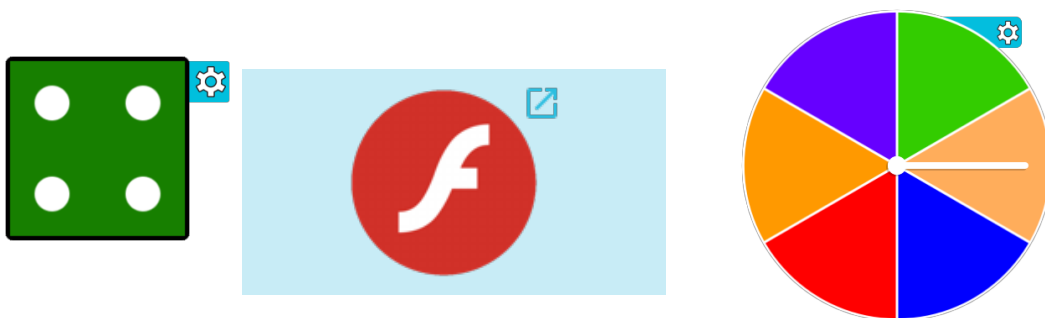


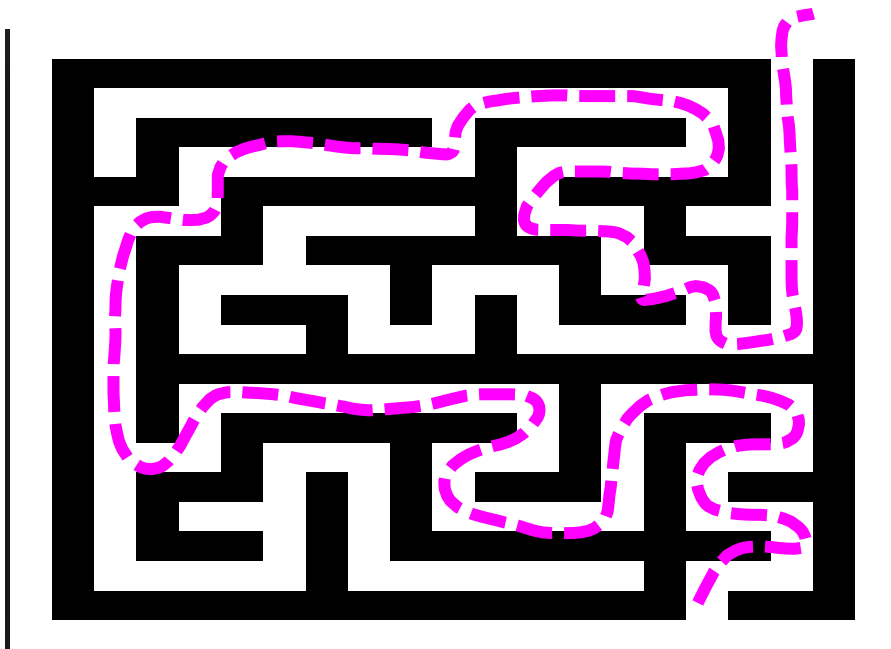
Warm-Up



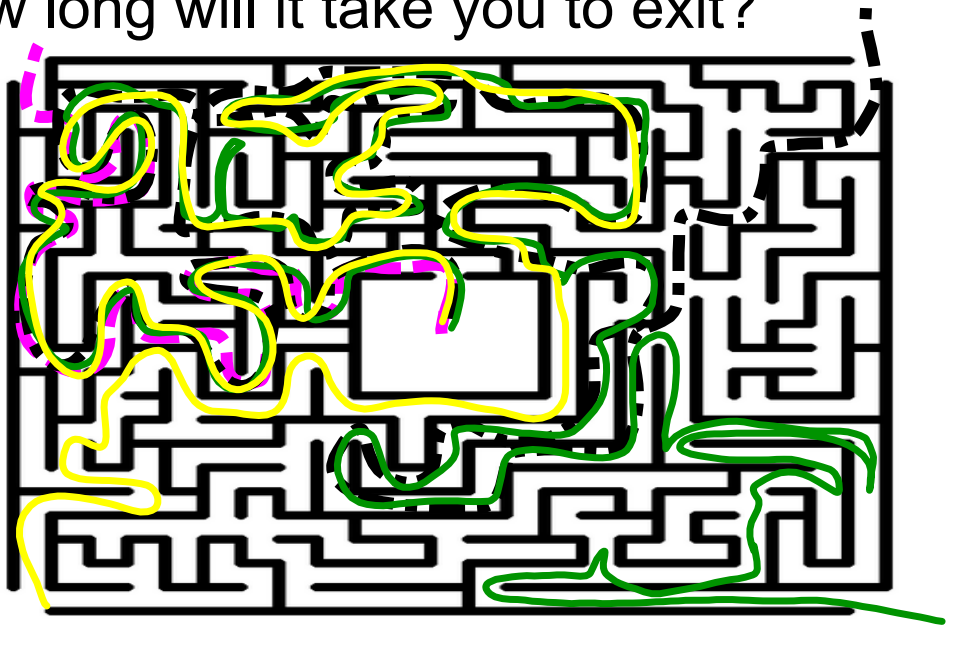
$$1. P(3 \& H \& \text{Blue}) = .167 \cdot .50 \cdot .167 = 1.39\%$$

$$2. P(\text{even} \& T \& \text{Red}) = .5 \cdot .5 \cdot .167 \\ = 4.18\%$$

What is this? How long will it take you to exit?

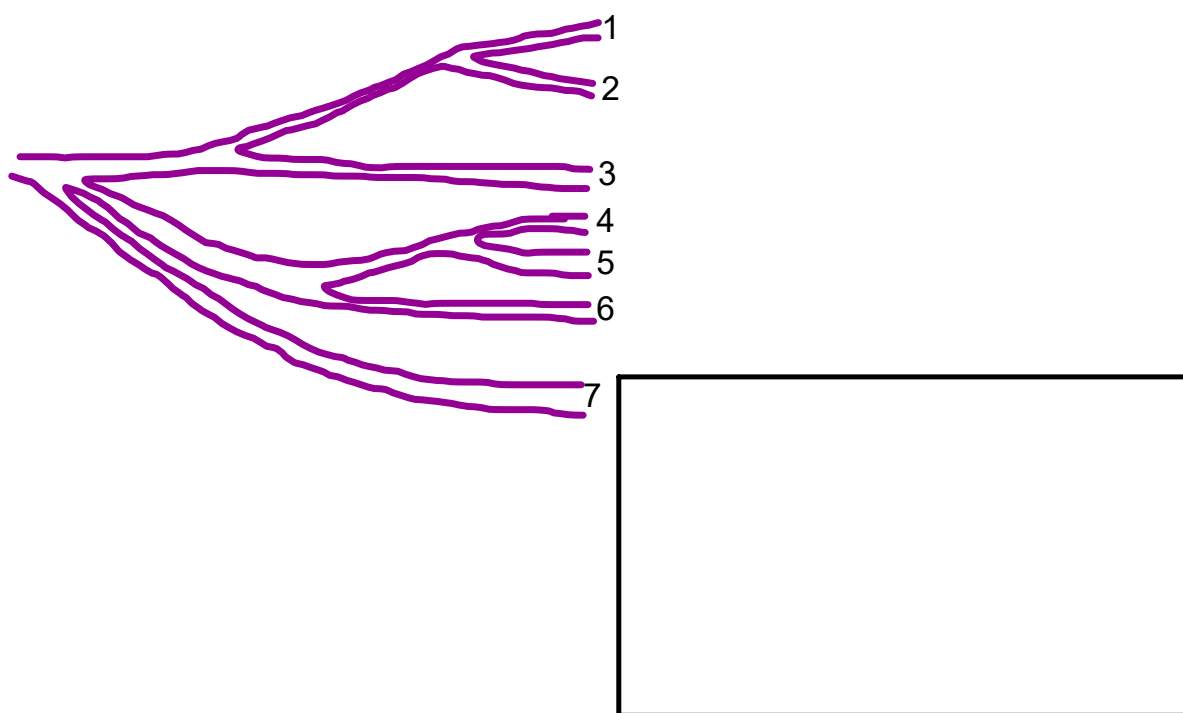


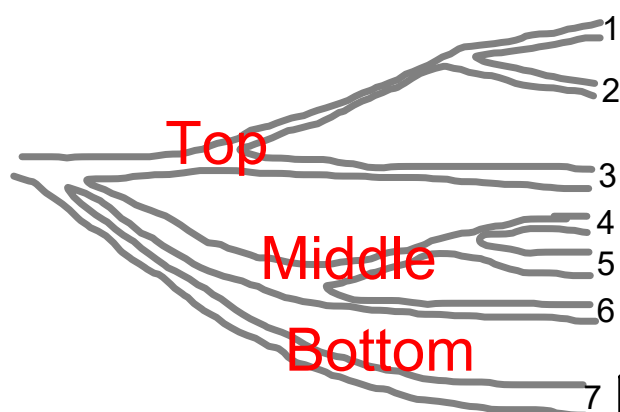
How long will it take you to exit?



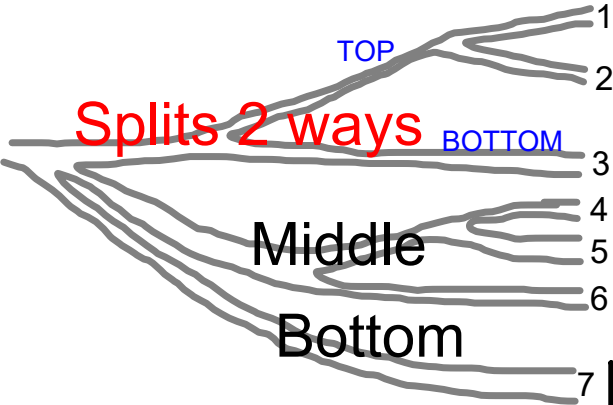




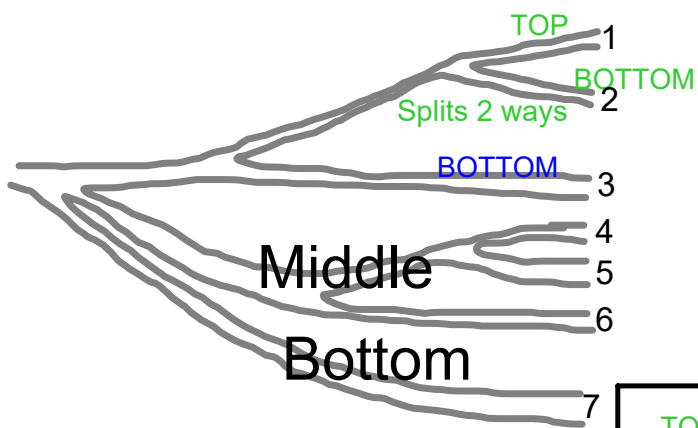




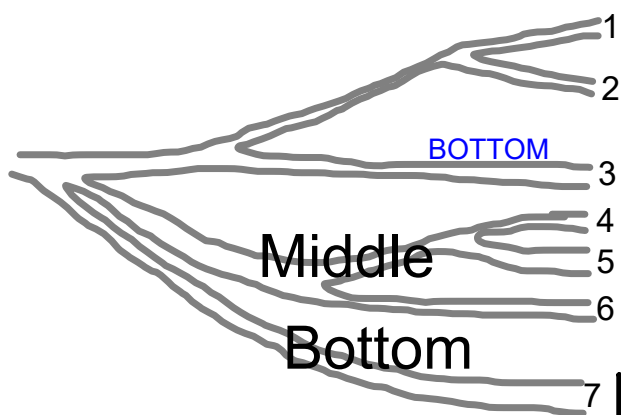
Top Branch
Middle Branch
Bottom Branch



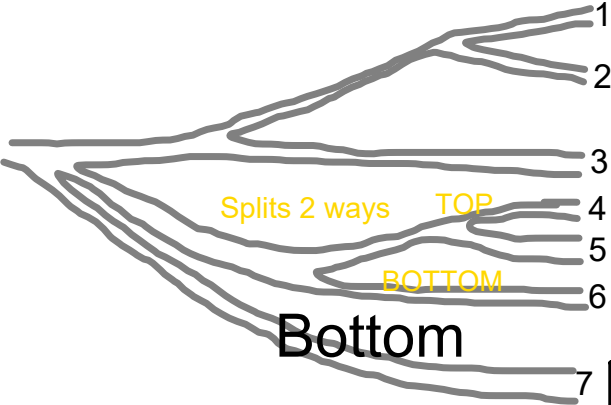
TOP	BOTTOM
Middle Branch	
Bottom Branch	



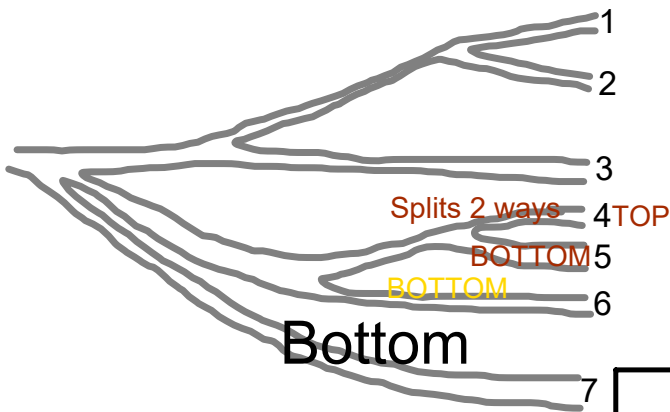
TOP	BOTTOM	BOTTOM
Middle Branch		
Bottom Branch		



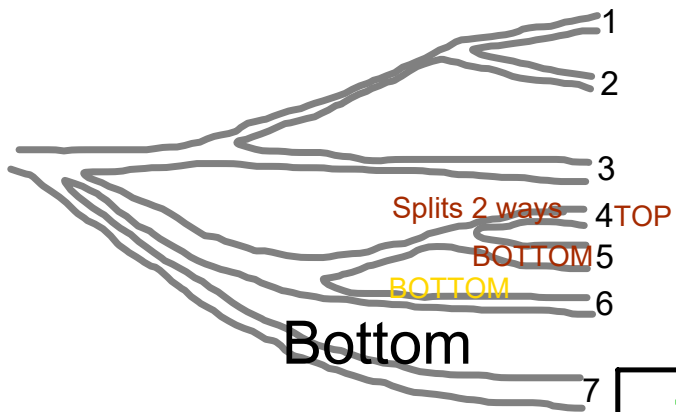
1	2	3
Middle Branch		
Bottom Branch		



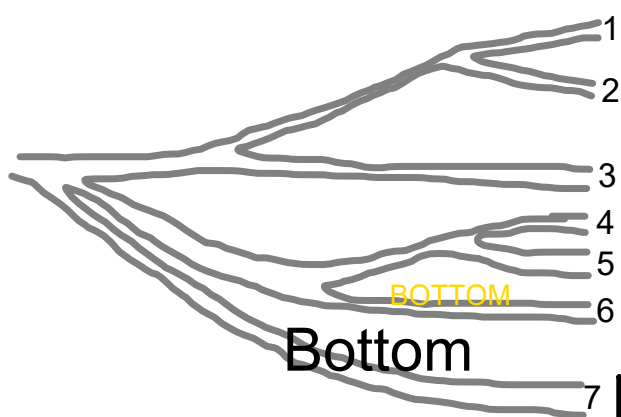
1	2	3
TOP		BOTTOM
Bottom Branch		



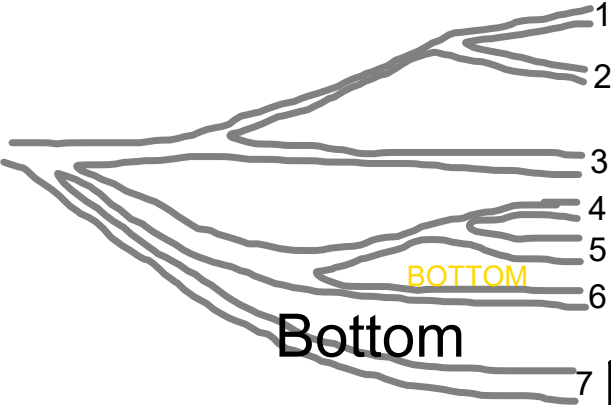
1	2	3
TOP	BOTTOM	BOTTOM
Bottom Branch		



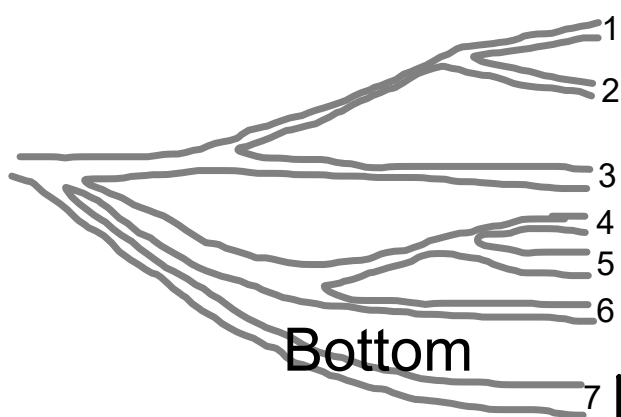
1	2	3
4	5	BOTTOM
Bottom Branch		



1	2	3
4	5	BOTTOM
Bottom Branch		



1	2	3
4	5	6
Bottom Branch		



1	2	3
4	5	6
7		

1	2	3	
4	5	6	
7	7	7	

3

3

LCM(3,3,1)
= 3

1

9

P(7)? = $\frac{3}{9} = \frac{1}{3}$
~~33%~~ 9 3

P(2)? = $\frac{1}{9} = 11\%$

P(6)? = $\frac{1}{9} = 11\%$

Y Y	Y Y	N N	3
Y Y Y	N N N		2

Step 1: Place outcome for path in correct row:

Path 1 - Y Y N

Path 2 - Y N

$$LCM(2, 3) = 6$$

Step 2: Find LCM for # of events listed:

6

Step 3: Make each row have same # events as LCM

Step 4: Find probability (LCM is denominator)

$$P(Y) = \frac{1}{12}$$

~~12~~
(12)

N	N	N	N	N	N	N	N	N	N	N	N	2
Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y	3
Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y	4

Step 1: Place outcome for path in correct row:

Path 1 - N N

Path 2 - Y N Y

Path 3 - Y N N Y

$LCM(2,3,4)=12$

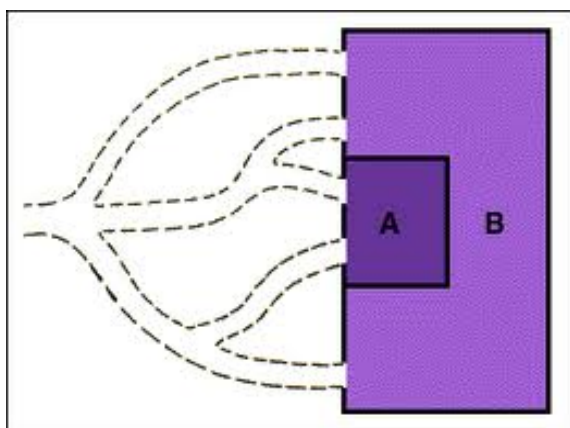
Step 2: Find LCM for # of events listed:

12

Step 3: Make each row have same # events as LCM

Step 4: Find probability (LCM is denominator) $12 \div 3 = 36$

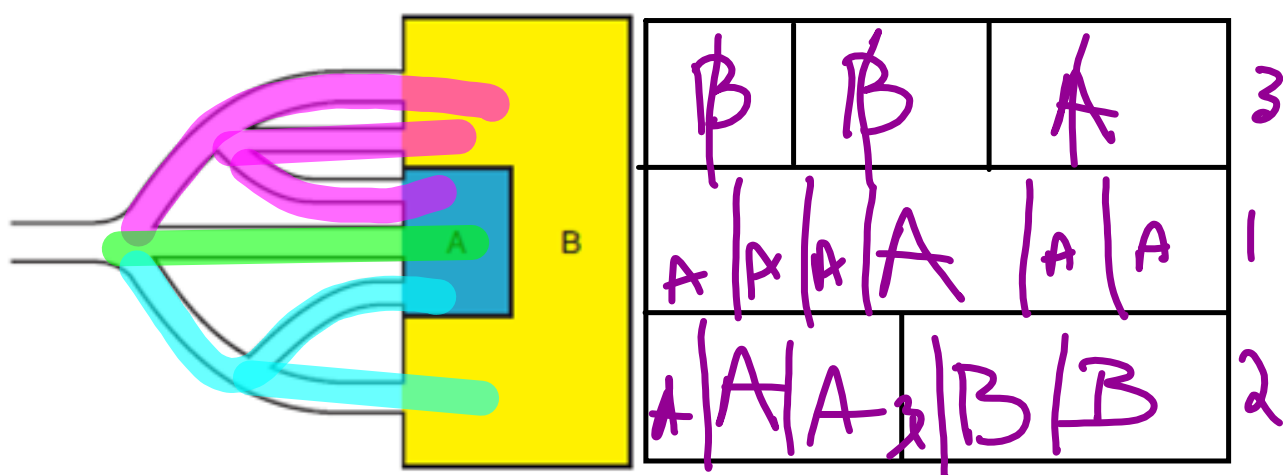
You Try!



B B		1
B	A	2
A	B	2

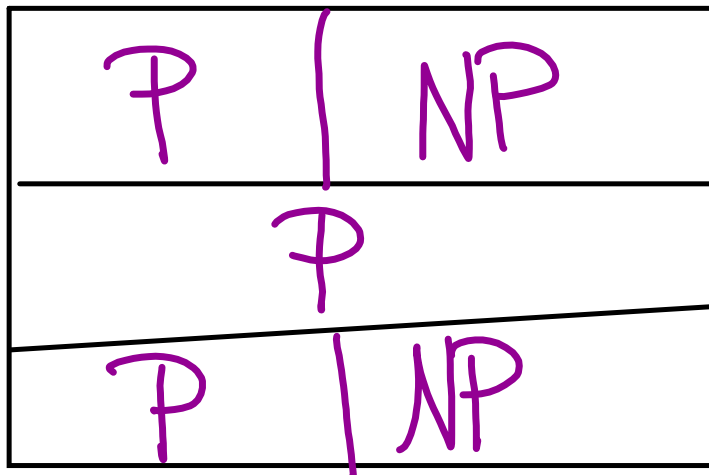
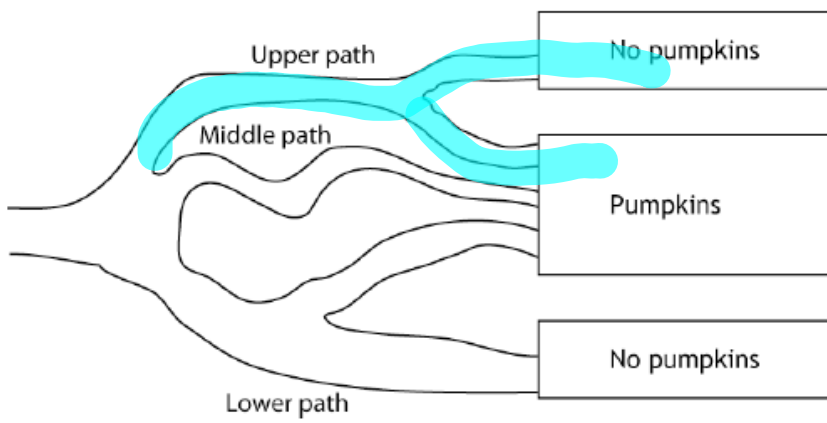
$L_{in} = 2$

$$P(A) = \frac{2}{6} = \frac{1}{3} \quad \frac{1}{6}$$



LCM=6

$$\text{denom} = 6 \cdot 3 = 18$$

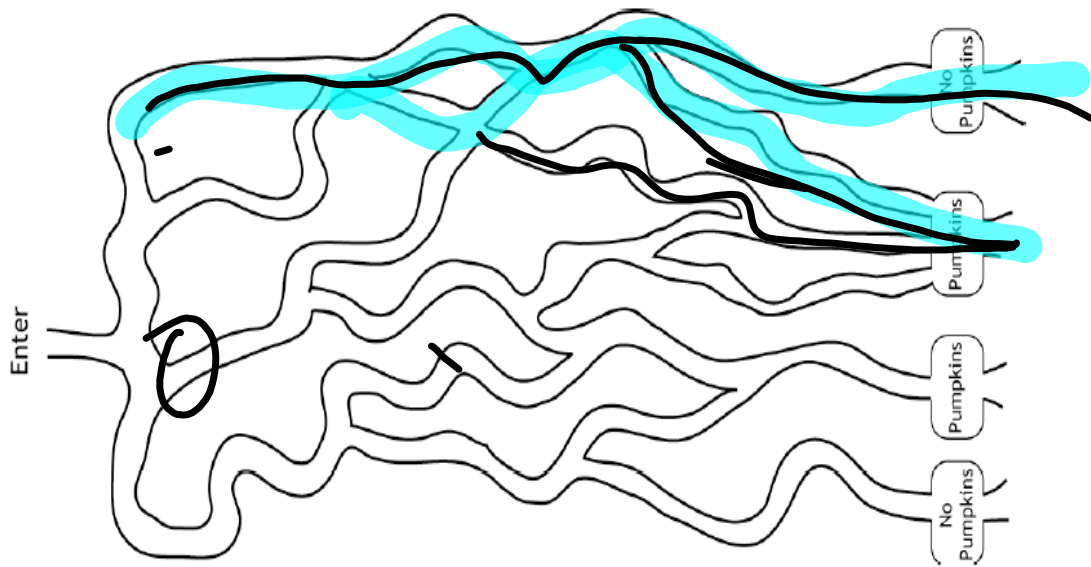


$LCM = 2$

den = 2 * 3
= 6



Y	N	Y	N
Y	N		
N	Y	Y	N



NP / NP	P	P

