

MathFLIX CHALLENGE

Exponential Growth

After watching the movie, can you complete Diane's table? Notice the similarity between exponential notation and the number of cuts.

# of cuts	# of papers	Multiplication by 2	Exponential Notation
0	1	n_2	2^0
1	2	2	2^1
2		2×2	2^2
3		$2 \times 2 \times 2$	
4			
5			
6			

Part 2

Now, instead of folding and cutting one paper in half, see what happens when you fold one paper into thirds and cut. Can you complete Diane's table?

# of cuts	# of papers	Multiplication by 3	Exponential Notation
0	1	n_3	3^0
1	3	3	3^1
2			3^2
3			
4			
5			
6			