

# COUNTDOWN CHALLENGE

## Exponential Relationships

The equations below can be used to create linear and exponential sequences of numbers. Use the x variables given to finish the equations and complete the tables. Then graph the results to see the differences. Identify each equation as either linear or exponential. Will you need extra graph paper?

$$x = y$$

x	y
1	1
2	2
3	3
4	4
5	5
6	
7	
8	
9	
10	
11	
12	

$$2x = y$$

x	y
1	2
2	4
3	6
4	8
5	
6	
7	
8	
9	
10	
11	
12	

$$2^x = y$$

x	y
1	2
2	4
3	8
4	16
5	
6	
7	
8	
9	
10	
11	
12	

