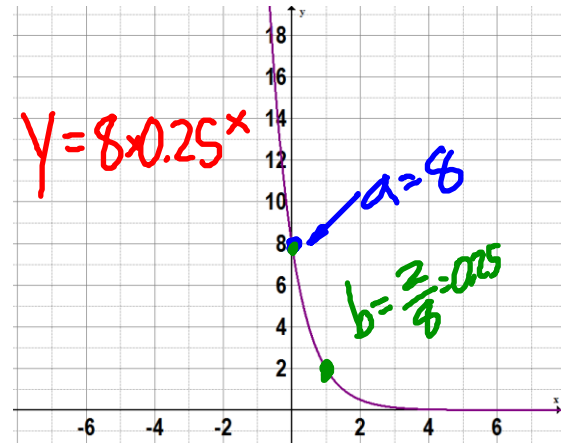
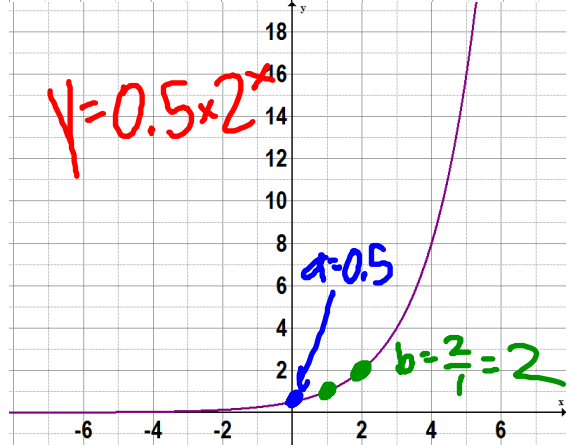
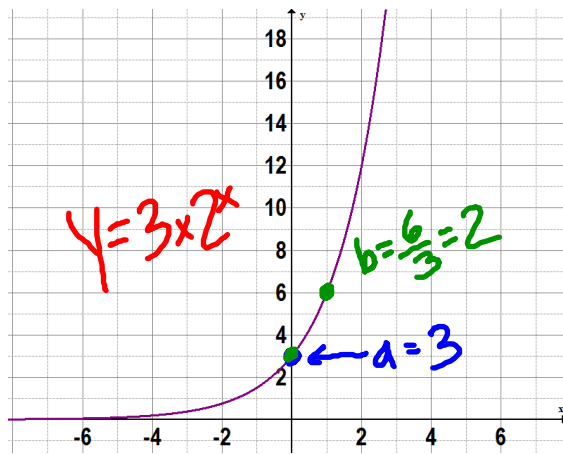
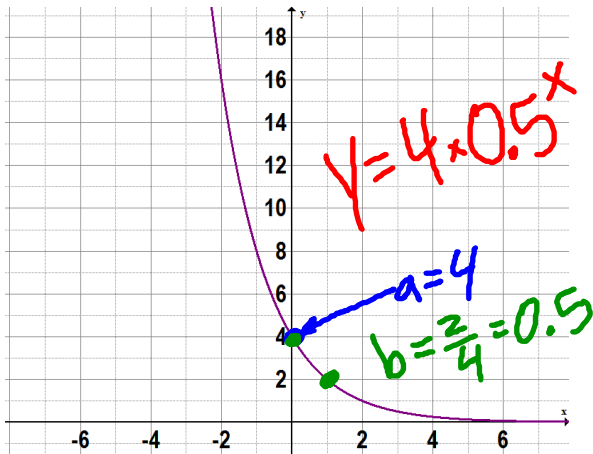


# Modelling Exponential Growth and Decay

## What's my Equation?



x	y
-2	1.5
-1	3
0	6
1	12
2	24

$b = \frac{3}{1.5} = 2$   
 $y = 6 \times 2^x$

x	y
0	0.5
1	0.25
2	0.125
3	0.0625
4	0.03125

$b = 0.5$   
 $y = 0.5 \times 0.5^x$

x	y
-4	0.01
-3	0.1
-2	1
-1	10
0	100

$y = 100 \times 10^x$   
 $b = 10$

x	y
-2	$\frac{3}{16}$
-1	$\frac{3}{4}$
0	3
1	12
2	48

$y = 3 \times 4^x$   
 $b = 4$

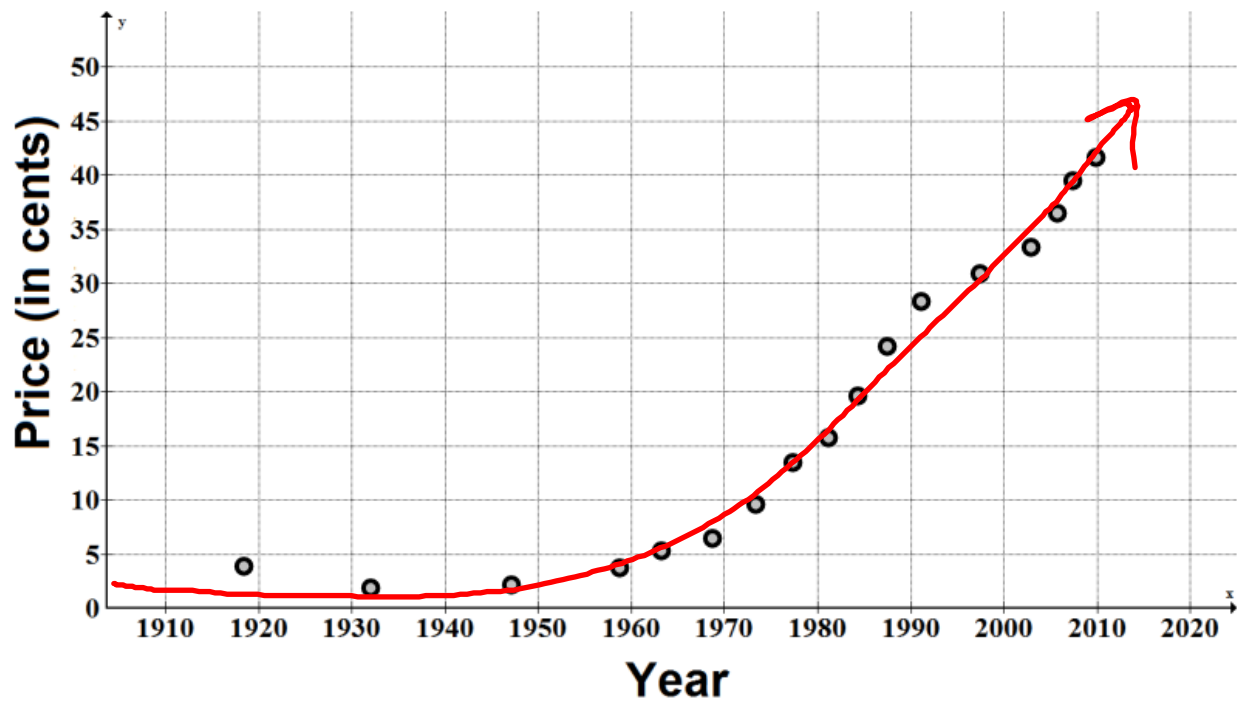
x	y
-2	0.0625
-1	0.125
0	0.25
1	0.5
2	1

$y = 0.25 \times 2^x$   
 $b = 2$

x	y
-2	250,000
-1	500,000
0	1,000,000
1	2,000,000
2	4,000,000

$b = 2$

$y = 1,000,000 \times 2^x$



Age (years)	Selling Price (\$)
0	21,000
1	17,000
2	13,800
3	11,200
4	9,000
5	7,300

$b = 0.8$