Exponential Review Week 1 and 2 Name_____

x	0	1	2	3	4	5	6
y	1	5	25	125	625	3125	15625

Write the rule. _____

Use the table above or the rule to find:

a.) f(4) = _____ b.) f(0)= _____ c.) f(2)=_____ d.) f(5)= _____

Use the function rule to find the following: $y = 10(4)^x$

f(0) = _____ b.) f(3) = _____ c.) f(-2) = _____ d.) f(2)=_____

x	0	1	2	3	4	5	6
y	1	5	25	125	625	3125	15625

Write the rule. _____

Use the table above or the rule to find:

a.) f(x) = 15625 b.) f(x) = 1 c.) f(x) = 125__ d.) f(x) = 5__ _____

Rewrite the following in standard form

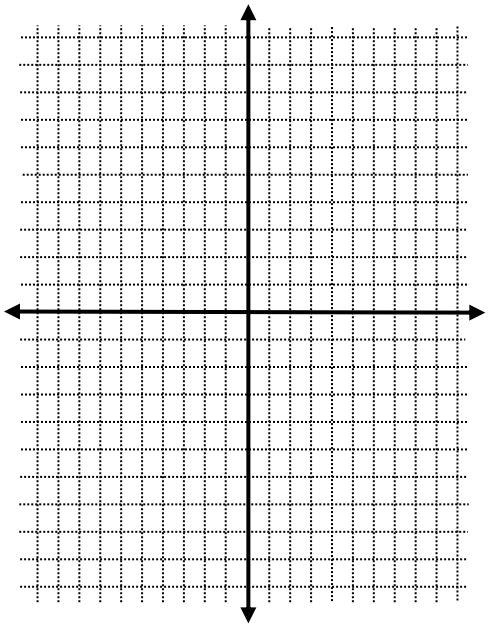
a. 5.3×10^{-4} b. 5.3×10^{4} c. 4.612×10^{8}

Rewrite the following in scientific notation.

a. .00000456 b. 65430000 c. .0089

Using your calculator, complete the table and graph the function $y = 4^x$. Then answer the following questions.

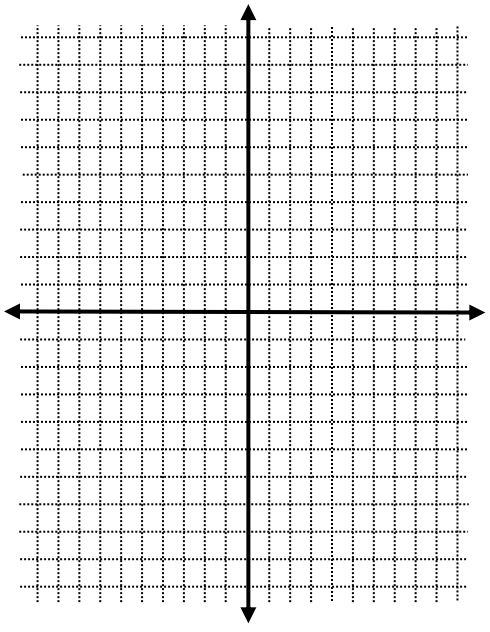
x	y
- 3	
- 2	
- 1	
0	
1	
2	
3	



1. Determine if the function is increasing or decreasing. **2. Determine the domain and range of the function.**

Using your calculator, complete the table and graph the function $y = .25^x$. Then answer the following questions.

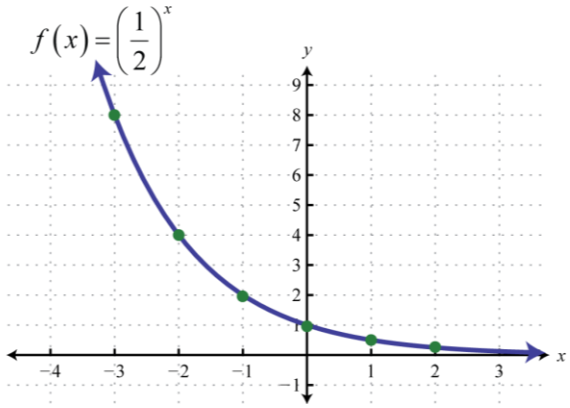
x	y
- 3	
- 2	
- 1	
0	
1	
2	
3	



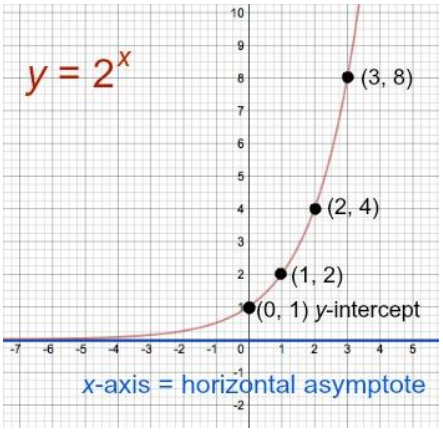
1. Determine if the function is increasing or decreasing. **2. Determine the domain and range of the function.**

Average Rate of Change

Find the average rate of change on the interval [-3, 1]



Find the average rate of change from x = 0 to x =3



Find the average rate of change from x = 0 to x =3

x	y
0	4
1	2
2	1
3	$\frac{1}{2}$
4	$\frac{1}{4}$

Find the average rate of change on the interval [-2, 1]

x	y	
-2	$\frac{1}{9}$	x3
-1	$\frac{1}{3}$	x3
0	1	x3
1	3	x3
2	9	

Find the average rate of change of the function $y = 4^x$ from x = -2 to x =3

Find the average rate of change of the function $y = 5(2)^x$ on the interval [-2, 1]